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Henry Smith.
1849.

PHYSIOLOGICAL OBSERVATIONS
ON
MENTAL SUSCEPTIBILITY;
THE
INFLUENCE OF EDUCATION
ON THE
VARIETIES OF THE HUMAN RACE
AND

The Brute Creation;

*Interspersed with Illustrative Anecdotes and Phrenological
Exemplifications.*

TO WHICH IS ADDED, AN

ESSAY

ON

HEREDITARY INSTINCT, SYMPATHY, AND
FASCINATION.

BY T. B. JOHNSON.

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INTRODUCTION.

IT has always required a degree of courage bordering on temerity to impugn established opinions, though the erroneousness and even absurdity of such opinions have become glaringly manifest ; because it has generally happened that the interest of a selfish portion of the community is placed directly in the way of investigation. When, in a very remote age, a few enlightened Hindoos appeared desirous to inculcate the sublime maxims

of genuine philosophy, when they testified an inclination to direct the human mind to the legitimate cultivation of the arts and sciences, they drew upon themselves the intolerant jealousy of the Pagan priesthood, by whom they were unrelentingly persecuted; and thus the taper of truth, which for some time shed a flickering light amidst the surrounding darkness of these swarthy regions, was smothered beneath the monstrous system of the Juggernaut, self immolation, and the infernal suttee. Similar observations are applicable to Egypt, where genuine philosophy, driven from the part of Asia mentioned above, re-appeared some time afterward. The sages of Greece hailed the legitimate doctrine with delight; they were anxious to inculcate it, but soon became

aware of the necessity of extreme caution in their laudable pursuits, as they, like their predecessors in scientific research, were beset by a jealous and persecuting priesthood, who eagerly took the alarm, lest the people should emerge from a state of ignorance suited to their sinister purposes. Hence originated the Mysteries of Eleusis, wherein the doctrine of nature was discussed by the few enlightened Mystics, while the lesser mysteries enumerated many thousand disciples. Yet this beautiful edifice for laudable disquisition, crumbled to ruins beneath the desolating progress of intolerance and fanaticism.

In all ages of the world, the great bulk of mankind have been either too indolent or too timid to think for themselves—have been

content to receive the dogmas of more daring (if not designing) spirits, rather than take the trouble of investigation.

When Galileo declared the sun to be a fixed body, he was summoned before the Inquisition, and with the threat of fire and faggot ordered to abjure as a “damnable heresy” that which the immortal Newton confirmed, and which has subsequently been acknowledged by all philosophers.

And did not Martin Luther incur the danger of an ignominious death, when he accused the Pope with the abuse of indulgences? In the year 1517, this celebrated Reformer promulgated his doctrines in Germany, and immediately drew upon himself

the persecuting jealousy of the ignorant priesthood of that period, as well as the unqualified disapprobation of the Emperor Charles V.; and although he was protected by Frederick, the enlightened Elector of Saxony, he could scarcely have escaped the contemplated vengeance, had not the state of the times been favourable for the furtherance of his views. Charles, though the most powerful monarch of his time, was frequently embroiled in war, and also in disagreements with his subjects. A similar observation may be applied to his formidable contemporary, Francis I., and also to the Pope; while Henry VIII. emancipated himself from the thraldom of the latter, and consequently became his enemy; so that a fortuitous concurrence of circumstances fa-

voured the establishment of that Reformation of which Luther laid the foundation.

The minds of men are as various as their persons, and are thus constituted for the wisest purposes ; for, how can doubts be dissipated and truth ascertained but by unshackled investigation ? Thought is involuntary ; a man may dissemble, but he cannot avoid, his thoughts : can anything, then, be more preposterous than the attempt to force all men to entertain the same opinion ? Charles V., who had caused rivers of blood to flow, not for the most amiable purposes, when old age crept upon him, resigned the crown of Spain in favour of his son, Philip, and amongst the amusements of his latter days was mechanism. “ He was particu-

larly curious in regard to the construction of clocks and watches ; and having found, after repeated trials, that he could not bring any two of them to go exactly alike, he reflected, with a mixture of surprise as well as regret, on his own folly, in having bestowed so much time and labour on the more vain attempt of bringing mankind to a precise uniformity of sentiment concerning the profound and mysterious doctrines of religion.”

As mankind became enlightened, they became tolerant ; and as the present age is distinguished for its increase of scientific attainments, it is reasonable to expect that its liberal feeling has kept pace with its superior knowledge. Dogmatism is not merely injurious, but directly opposed, to

the freedom of investigation ; and as I have freely expressed my opinions on the subjects which the following pages embrace, so I am quite willing that my readers should exercise a scrupulous, but an unbiassed, examination of them. Let these opinions be subjected to the test of reason, and I shall be content, though I unhesitatingly confess I am far from being indifferent to the good opinion of my fellow-creatures.

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PHYSIOLOGICAL OBSERVATIONS

ON

MENTAL SUSCEPTIBILITY,

&c.

CHAPTER I.

Origin of Languages.—Reason and Instinct.—Varieties of the Human Race.—The Missionaries, &c.—The Negro.

THE limited faculties of the human race will not enable us to investigate successfully those secrets or mysteries of nature which lie buried beneath the revolutions of incalculable ages; yet, although the origin of things must for ever remain inscrutable to our restricted powers of perception, it requires no great stretch of credulity to suppose that centuries had elapsed ere mankind discovered the mode of mental communication by language which is practised at the present moment by every variety of our fellow-creatures, from the polished European to the Indian of America, the jetty inhabitant of the African continent, and the savage of the South Sea Islands. However, that man is not the only creature physiologically formed for speaking is incontestably proved by the parrot, the magpie, the raven, and several other birds; and it appears not a little surprising, that while the feathered tribes are enabled to imitate the oral expression of human nature, this faculty is denied to quadrupeds, many of whom, and the dog in particular, evince a degree of sagacity infinitely superior to that which has ever been manifested by the fluttering

tenants of the air: still more remarkable is the circumstance of the ape, though an animal immeasurably superior to birds in sagacity, and so nearly approximating the form of man, but nevertheless utterly incapable of imitating those sounds of the human voice which are employed in the oral communication of ideas or workings of the mind.

It is not owing, as some have asserted, to any defect in the organs that the ape is incapable of speech, since the tongue of a monkey will be found as perfect as that of a man. Language is the offspring of concentrated thought: hence the lower orders of animated nature, insusceptible of the requisite mental arrangement, are consequently incapacitated for that oral expression which constitutes language; for, though their external senses are in general found superior to those of man, and many of them manifest an extraordinary degree of cunning or sagacity, they are unable to form that mental combination which may be said to constitute the essence of thought, and which so pre-eminently distinguishes the lord of the creation. The possession of speech corresponds to the more exalted intellectual endowments of man, is indispensable to their development and varied application. Man exhibits his mental operations by external signs; he communicates his sentiments by words; the savage and the civilized being have similar powers of utterance, and are equally understood.

Admitting, therefore, that language was adscititious, it must be regarded as a most important improvement upon the natural expression of inarticulate sounds, gestures, and actions; an intelligent medium whereby men make known their thoughts to each other, without which the uncultivated savage would have continued on a par with the beasts of the forest, while the beautiful fabric of civilized society could never have attained its supe-

rior and pleasing elevation. Yet, that this exalted characteristic of man is not born with him, like the voices of animals, is incontestably proved by the different languages of the various classes of mankind distributed upon the surface of the globe, and consequently its attainment must have resulted from education.

How far the influence of climate may have operated in the formation of language, or at least upon its innumerable varieties, is a subject not altogether unworthy of notice in this place. The extremes of heat and cold are unfavourable to the beauty of the human form, and also to cerebral organic development; while, in milder latitudes, these qualities acquire their greatest perfection: if, therefore, the atmosphere thus diversifies the body and the mind, may it not equally influence the powers of speech, and produce those oral modifications so evidently perceptible in the various classes of mankind? Beneath the burning sun of the equator or the tropics, utterance or enunciation becomes soft; in northern regions it is remarkable for its guttural harshness; while, in the temperate climates, it attains its greatest force and harmony of expression.

Therefore, if the mind of man may be said to have elicited his powers of speech, it must be regarded as his most distinguishing characteristic, exalting him above the brute creation infinitely more than that physiological superiority by which he is also distinguished. What is the most sagacious animal compared to man? The effeminate native of the East governs the stupendous and "half-reasoning" elephant, the Arab directs the speed and powers of his elegant and fiery steed, while the diminutive Laplander applies the reindeer to the labour and purposes of his existence; in fact, the most inferior class or lowest order of the human race are able to manage the most sagacious and the most powerful

animals, and render them subservient, not by bodily strength, but by the superiority of their mental powers. Yet we see the stronger and more sagacious of the brute creation possess not the capacity of reducing the inferior tribes to a state of servitude or dependance : it is true, the roe and the antelope fly from the lion and the tiger, since it is the nature of ferocious animals to devour the timid inhabitants of the forest ; but, correctly speaking, there is no mark of subordination among animals, nor the least trace of acknowledged inferiority further than that which results from mere safety or self-preservation. Consequently, the nature of man is easily distinguishable from that of the brute, and justly entitles him to become lord of the creation.—Man stands alone ; there is an interval between him and brutes which no animal can fill up. The man-mimicing ouran-outang, the reasoning elephant, the sagacious dog, have made no progress in improvement, but are precisely what they were three thousand years ago ; the bird and the beaver construct their habitations in the same manner as their remote progenitors ; and so the bee forms its curious receptacle for delicious sweets : but what has been the progressive advance of man ? From a state of helpless infancy, he acquired the communication of thought, he attained the command of the inferior orders of creation, he cultivated the arts and sciences : thus, by man such a field has been opened for the energies of our race, that the mind becomes bewildered by the brilliant and interminable prospect. Hence may be perceived the influence of education on mental susceptibility.

The invention of writing, like the acquisition of language, became an important, indeed an incalculable, acquisition for an advance in the progress of knowledge ; by this beautiful science an individual is

enabled to convey his ideas to his friends or connexions at the antipodes, or the remotest corners of the earth.

By this language of the eyes, distant countries might be said to be brought in contact, or made to approximate each other; while commerce acquired a degree of acceleration which, prior to this period, must have been regarded as impossible of attainment. At length, that extraordinary mode of multiplying alphabetical communication, by means of the printing-press, was brought to light, the wonderful operation of which would appear absolutely illimitable in the progress of knowledge, and the advancement of the happiness of mankind.

Having noticed the influence of climate on the human form, mental capacity, and enunciation or oral utterance, it may here be added, that from the same cause originated the diversity of speech we find spread over the surface of the globe, which presents a serious, if not an insurmountable, obstacle in the way of that unqualified or obvious mode of oral or written communication, which a general language would not merely accelerate, but effectually accomplish.

I shall be asked, perhaps, how happens it, if my theory be correct—if climate produces that diversity of form, of mental capacity, and oral enunciation, which I have attributed to it—that, in the same parallel of latitude, an absolute uniformity in these respects is not found to exist? To which hasty and inconsiderate glance at the subject, I unhesitatingly answer, that, in order to form a correct estimate of the atmospheric influence in every part of the same parallel of latitude, we must duly consider the localities, the distance or approximation to the sea, the elevation, the presence of mountains, as well as a variety of other modifications. That the difference

of sound in the human voice in different regions led to that diversity of language at present so conspicuously perceptible, no doubt, I think, can be entertained; and although the establishment of a uniform mode of oral and written expression of ideas may appear impossible to many, to me it does not present itself in the same insurmountable manner. Does such “a consummation, so devoutly to be wished,” appear more improbable than the invention of writing, and its illimitable multiplication by the printing-press? I think not; and though the task may appear to be attended with difficulties of no ordinary character, such a circumstance ought rather to stimulate our energies than repress or check our exertions in the prosecution of so highly important and magnificent an undertaking—since myriads of proofs are spread before our eyes of the extraordinary susceptibility of the human mind, as well as of the wonderful influence of education. We are already in possession of something approximating a universal system of notation by the invention of the Arabic figures; so simple, yet so superior to the Roman numerals, susceptible at the same time of combination *ad infinitum*.

According to our great lexicographer, Dr. Johnson, *Education* implies the instruction and formation of manners in youth; or that general probation of the human mind, which is too well understood to need further recapitulation in this place, but which is by no means sufficiently extensive in its application to generate a clear idea of that comprehensiveness which the sequel is intended to embrace, in as succinct a manner, however, as may be found consistent with requisite or indispensable elucidation. As I conceive that whatever alters or improves the mental faculties may be correctly termed the *Influence of Education*, my observations will not be confined to the exercises of the grammar-school,

and the instructions of the college, but extend to the operations of the human mind presented in varied forms, as well as to the manifestations of the corresponding quality in the lower orders of creation, distinguished by the appellation of *instinct*.

The Rev. C. C. Colton, in his first volume of 'Lacon,' observes, "No sound philosopher will confound instinct with reason, because an ouran-outang has used a walking-stick, or a *trained* elephant a lever;" and yet, in the very words which he utters to controvert what he would wish to have understood as false doctrine, he proves its truth, even to unqualified demonstration: for, how could an ouran-outang be taught to use a walking-stick, if it were utterly destitute of the power of reason? How could an elephant be susceptible of education (which *training* evidently implies) if it did not possess, in some degree, the perceptive and reflective faculties? What is called instinct in the brute creation is evidently a power or faculty of reasoning, incomparably inferior, however, to this divine gift in man; and which indeed will be found, both in the one and the other, to present an endless variety for the contemplation of the philosopher.

As mysterious and wonderful Nature branches out her works into an infinity of ramifications—that, as in the brute creation, the genus comprehends a number of tribes or species, the latter also presenting distinct varieties—so in the first order of animated beings, Man, there are classes as clearly definable as possible; and what is equally incontestable, throughout the whole we shall find mental manifestation precisely in proportion to cerebral development—in the latter called *reason*, in the former *instinct*.

It has been observed, that "the differences which exist between the inhabitants of the various regions of the

globe, both in bodily formation and in the faculties of the mind, are so striking, that they must have attracted the notice even of superficial observers. With those forms, proportions, and colours, which we consider so beautiful in the fine figures of Greece, contrast the woolly hair, the flat nose, the thick lips, the retreating forehead, advancing jaws, and black skin of the Negro; or, the broad square face, narrow oblique eyes, beardless chin, coarse straight hair, and olive colour of the Calmuc. Compare the ruddy and sanguine European with the jet black African, the Red man of America, the yellow Mongolian, or the dark brown South Sea Islander; the gigantic Patagonian to the dwarfish Laplander; the highly civilized nations of Europe, so conspicuous in arts, science, and literature, in all that can strengthen and adorn society, or exalt and dignify human nature, to a troop of naked, shivering, and starved New Hollanders, a horde of filthy Hottentots, or the whole of the more or less barbarous tribes that cover nearly the entire continent of Africa." Nor are the differences of bodily conformation, complexion, and colour, more remarkable, or more varied, than the qualities of the mind; while the class presenting the most beautiful form has uniformly manifested a corresponding degree of intellectual superiority.

Philosophers, and Blumenbach in particular, divide the human species into five varieties, namely, the Caucasian, the Mongolian, the Malay, the American, and the Ethiopian. The Caucasian variety includes the Europeans, except the Laplanders and the rest of the Finnish race; the inhabitants of Western Asia, as far as the river Ob, the Caspian Sea, and the Ganges; the northern Africans, including not only those north of the Great Desert, but some tribes placed in more southern regions; the Egyptians, Abyssinians, and Guanches.

The Mongolian variety includes the numerous, more or less rude, Nomadic tribes which occupy Central and Northern Asia, as the Mongols, Calmucs, and Burats; the Mantchoos, Tungooses, &c. &c.; the Chinese and Japanese; the inhabitants of Thibet, Bootan, Cochin China, Ava, &c. &c.; the Finnish races of Northern Europe, and the tribes of Esquimaux extending over the northern parts of America, from Behring's Strait to the extremity of Greenland.

The Malay variety comprehends the inhabitants of the peninsula of Malacca, of Sumatra, Java, Borneo, Celebes, and the adjacent Asiatic Islands; of New Holland, Van Diemen's Land, New Guinea, New Zealand, and the islands scattered through the whole of the South Sea.

The American variety includes all the Americans, except the Esquimaux.

The Ethiopian variety comprehends all the natives of Africa not already enumerated; that is, the Negroes and black race in general.

This classification of human nature, however, must not be understood as indicating that each variety is precisely similar in physical and moral traits; on the contrary, this general characteristic conformity admits of various and strongly-marked modifications: yet, as the Caucasian variety is much superior to the other classes in beauty of form and mental capacity, so the characteristic variations will be found more numerous, if not more impressively distinguished.

The most beautiful specimens of the Caucasian variety of the human race at present are exhibited by the Europeans, the Greeks, the Turks, and the Georgians; and to these might be added those erratic tribes known by the name of Gipsies, amongst whom will be found some of the finest forms in creation. From the supe-

rior shape and greater capaciousness of the skull of this class, the greatest mental powers have uniformly flowed : nearly all the arts and sciences were discovered by them ; indeed, almost our whole treasure of knowledge and literature has been derived from the same quarter ; and they may be said to occupy the middle regions of the earth, while its extremities are peopled by the inferior classes.

The Hindoos of high caste may be said perhaps to belong to the Caucasian variety ; and to them indeed we are probably indebted for the rudiments of that intellectual superiority for which Europe has so long been pre-eminently conspicuous. Egypt may be regarded as the link which united Asia to Europe, by means of which the early knowledge that dawned in the East became spread over the Western world. Oriental pantheism, which represented the universe as an emanation from the primary Being, penetrated into Egypt. The Indian philosophers explained this system by the image of a spider, which draws from its own bosom the thread that forms its web, sits in the midst of its work, communicates movement to it, and at pleasure draws back what it had sent forth from its own body. The Egyptians received the Eastern traditions, and, in an altered form, transmitted them to the Greeks, where they easily adapted themselves to the lively imagination of that extraordinary people.

Having remarked that modifications were observable in the varieties of the human race, it may be here stated, that if we admit the superior castes of the Hindoos and the ancient Egyptians into the first or Caucasian class, we must understand them as several shades inferior to the Europeans ; a notion the correctness of which is collaterally confirmed by the mouldering monuments which manifest the architectural skill of these people.

Our surprise may be excited by the stupendous ruins found in various parts of India, as well as by the magnitude of those almost imperishable records of human folly, the Pyramids of Egypt! But what are these compared with the specimens of art, which at this remote period attest the decided superiority of Greek and Roman genius? Hence it may be inferred, that the Hindoos and Egyptians had attained the greatest degree of civilization of which they were susceptible; and from the proofs which they have transmitted to posterity of their progress in the arts and sciences, I feel no hesitation in stating that their capacity was inferior, much inferior, to that of the Greeks or the Romans.

The Caucasian variety of the human race, more beautiful in form, and naturally qualified for the highest intellectual attainments, have, from the earliest periods to the present time, uniformly manifested an impressive physical and moral superiority; which has, however, appeared in modified shapes, in accordance with the progress of education in the different countries, in some checked by the barbarous despotism of the government, in others by the jealousy of an ignorant, avaricious, and intolerant priesthood: while, under the milder and more enlightened states, it has been protected and encouraged; and, in consequence, its influence has become apparent in corresponding manifestations, strikingly exemplified in the intellectual characteristics of the English, the French, and the Germans, compared with those of the Russians and Turks.

As the limit of the human faculties is beyond the reach of precise definition, so the exact boundary of the influence of education can never be ascertained. The tree of knowledge spreads forth its numerous branches in various forms; and as the human mind is not constituted alike in any two individuals, different opinions cannot fail to be entertained as to the

kind of intellectual attainment best calculated for our welfare and happiness, as well as of the mode of acquiring it; but, unless some more expeditious and more effectual mode could be adopted of imparting a knowledge of the Latin language than through the medium of the Eton Grammar, I cannot help thinking, that, in a countless number of instances, seven years of a boy's life are uselessly employed or thrown away. An acquaintance with various languages is all very well in its way, and may be desirable where there exists a thirst for it, and a requisite capacity for its attainment; but let it not be forgotten, that after much time and labour have been spent upon the study in question, and a competent knowledge obtained, the mind thus becomes loaded with a number of artificial signs, which can never generate or produce new ideas, and, I am inclined to think, scarcely assist the powers of expression. A professed linguist will very rarely be found overburthened with genius or ability; and, in defiance of his immense mental store of the elements of composition, neither his orations nor writings are found to evince that superiority which an unreflecting view of the case would suppose him capable of imparting. A knowledge of modern languages is pleasant and useful, because it enables the possessor to converse with strangers, or correspond with foreign countries; and, in this respect, the French is preferable to every other, on account of its being more generally understood: but, in the present state of the world, when the literary treasures of the ancients are to be found in all the tongues of the present day, the time which youth devote to the acquisition of the dead languages, and far more frequently to the abortive attempt, might be much better employed in the attainment of useful instructive science and sound philosophy.

If we take a retrospective glance at ancient Greece,

at a period when its genius produced those specimens of art and science which have continued unrivalled—those compositions in prose and verse which have never been surpassed—one language only was used, and indeed it may truly be said, that one language only was understood.

In most of our seminaries for education, an obstinate adherence to antiquated customs is perseveringly pursued, to the serious injury of the pupil; and, in defiance of common sense and reason, folly is allowed to usurp the station where philosophy ought to become paramount. Like linguists, schoolmasters are not remarkable for genius; nor is it an uncommon occurrence for a person of this class to profess to teach Latin and Greek, who is utterly incapable of expressing his ideas correctly in his mother tongue.

Instead of that systematic sameness so prevalent in the education of youth, a well-considered discretion should be exercised; the construction of the tyro's mind should be ascertained, and his studies selected according to the bent of his genius, or the peculiar faculties of his mind. There perhaps never occurred an instance where an individual was calculated to excel in all the arts and sciences; and although the story of the "Admirable Crichton" has been placed before the eyes of the world in several, indeed many, publications, those who can credit what is related of him must possess a much more than ordinary share of credulity. The Emperor Napoleon, unquestionably one of the most extraordinary men that ever appeared, and whose operations, being so importantly public, enable any person of reflection to form a tolerable estimate of his character, evinced more skill in occupying positions than in defending them: he could fight a battle, but could not effect a retreat; he was deficient in what the

old and ill-used Roman general, Sartorius, deemed essentially requisite in the commander of an army, namely, looking behind him. Similar observations are equally applicable to Hannibal, to Julius Cæsar, to Julian the Apostate, and indeed to all those illustrious individuals, whose extraordinary and well-authenticated actions and performances have been transmitted for the interesting amusement and instruction of admiring posterity.

Since, then, the powers or faculties of the mind appear in various forms, how incumbent is it in those who have the direction of youth to ascertain the most active and the leading features or faculties, and direct the attention accordingly. At this stage of my inquiry the science of Phrenology presents itself; and notwithstanding the sneers of those whose ignorance incapacitates them from forming any definite opinion upon the subject, I cannot withhold my conviction of the soundness of its doctrines, and the important truths which they are calculated to elicit. The author of 'Lacon' says, the system of Gall and Spurzheim is too contemptible to be laughed at, unconscious that he has given many proofs of the falsehood of this assertion in that farrago of ill-assorted and wretched aphorisms which appear under the above title; and from which may be clearly perceived, that the organ of self-conceit in his own cranium was distinguished by a preponderating, if not an overpowering, development.

If a knowledge of the science of Phrenology will enable a parent to direct the attention of his child to the proper channel of instruction, it must be admitted that it is one of the most valuable discoveries ever made by the persevering sagacity of human genius; and that it is well calculated for this highly-important purpose numerous incontestable proofs have been given

to the world, while so many conclusive instances of its truth have fallen under my own immediate observation as entirely to dissipate my doubts upon the subject. Under such circumstances, that is, where the peculiar or preponderating faculties of the mind are properly directed, education will be eagerly received, and its influence will not fail to become conspicuously, though progressively, manifest.

Having already placed the Caucasian variety of the human race at the head, or as the first class, of the genus *Homo*—as indeed justly entitled to this distinction from the superior elegance, nobleness, and beauty of proportion and form which the inhabitants of every part of the globe, under this denomination, uniformly offer for the contemplation of the physiologist or the philosopher—and having described this superiority of animal conformation as productive of, or accompanied by, corresponding mental faculties; it may be justly observed, that the truth of this hypothesis is incontestably proved, not merely by the records of antiquity and ocular demonstration, but by well-authenticated historic detail from the earliest periods to the present time. Have we not the most interesting, the most impressive, evidence of it in the mighty architectural remains of India and Egypt—in the magnificent and imperishable monuments of Grecian genius? And if, in the present day, the same variety of the human race have not rivalled the gigantic and splendid edifices of former times; if they have not excelled the Greeks and Romans in the elegant arts, in poetry, in eloquence, the productions of the pencil or the chisel; they have, nevertheless, maintained the superlative position which distinguishes them from the inferior races of their own species.

The Mongolian variety, distinctly marked by an

inferior form, as well as by a less intellectual and less pleasing countenance, comes next under consideration. It is the second in degree; and yet what a contrast is presented to the acute physiognomist, or even the common observer, in the small, low forehead, the oblique eye, the flattened face, and ill-defined features of the Mongolian; and the elevated and expanded frontal, the visual intelligence, and well-marked countenance of the Caucasian!

Attila, the celebrated conqueror, came under the description of the Mongolian variety, of which he may be regarded as the most eminent sample or specimen. Gibbon observes: "Attila, the son of Mundzuk, deduced his noble, perhaps his regal, descent from the ancient Huns, who had formerly contended with the monarchs of China. His features, according to the observation of a Gothic historian, bore the stamp of his national origin; and the portrait of Attila exhibits the genuine deformity of the modern Calmuc—a large head,* a swarthy complexion, small deep-seated eyes, a flat nose, a few hairs in the place of a beard, broad shoulders, and a short square body, of nervous strength, though of a disproportionate form."

As a warrior, Attila raised himself to pre-eminent distinction: the extent of his empire forms an incontestable proof of his successful career, as well as of the number and importance of his victories. Yet, in all his transactions, either civil or military, nothing like intel-

* Gibbon is mistaken, when he represents the Calmuc with a *large head*; on the contrary, the Mongolian variety of the human race (the Calmuc of course included) are by no means remarkable for large heads, but the contrary: however, the low frontal and general depression of the superior part of the cranium, caused the delusion by which our justly-celebrated historian was evidently led astray.

lectual attainment is discoverable; the hypocritical cunning and sagacity, which, in the lower varieties of the human race, supply the place of the higher qualities of the mind, were remarkably conspicuous in him; and enabled this barbarian, assisted by a countless host of savage and ferocious warriors, to make the Persians tremble, to overthrow the armies of the Eastern Empire in the extensive plains between the Danube and Mount Hæmus, in the Chersonesus of Thrace, and ultimately to ravage the country to the very suburbs of Constantinople; while Theodosius and his court were indebted for their lives to the invincible bulwark opposed to the progress of the barbarians by the walls of that city. With such instruments at his command, he levied contributions on the Western Empire, and kept Valentinian III. in constant alarm. Yet, as far as relates to the arts and sciences, he made no progress; his empire, in the space of several thousand miles, did not contain a single city, while his capital, situated between the Danube, the Teyss, and the Carpathian Mountains in Upper Hungary, was nothing more than a huge village, the houses of which were built with wood. The dwellings of the more illustrious Huns were built and adorned with rude magnificence, according to the rank, the fortunes, or the taste of the proprietors. The palace of Attila, which surpassed all other residences in his dominions, was built entirely of wood, covered an ample space of ground, and was surrounded by lofty palisades of smooth square timber. In fact, Attila and his Huns, amidst the countless treasures arising from successful and extensive rapine and desolation, never rose in the improvements of human or civilized life beyond the simplicity of Scythian shepherds; no monument was raised to commemorate their fame, the mouldering of which might, like the architectural ruins of India, the Pyramids of Egypt, or the almost imperish-

able monuments of Grecian and Roman skill, have reminded the present age of their existence; while Attila might regret, that out of the myriads of his subjects, there was not a native Hun with intellectual attainment sufficient to transmit to posterity an account of his war-like achievements.

Let it not be forgotten that a false or fallacious estimate is generally entertained of the military character of the successful soldier. Madame de Staël, in her work on Germany, published before the Peace of Paris, when she had not seen the Duke of Wellington, but taking the magnitude of his exploits as the gauge of his mind, eulogized his genius to the skies. On closer acquaintance in the saloons of Paris, her opinions underwent a complete revolution, and she unhesitatingly stated, that “*hors les affaires militaires, il n'avait pas deux idées*”—(excepting in military affairs, he had not two ideas). The god of her idolatry had proved an ordinary mortal, and in her vexation she pronounced him a brute. The anecdote, however, is a good illustration of the highly erroneous estimate of the successful soldier. Since the Duke of Wellington has displayed his powers in the senate, no person can perceive the high commanding genius; but merely a man of ordinary capacity, supported by perseverance and great firmness of purpose. He has propped and overturned thrones, the people have quailed beneath his frown; but it has become apparent that these things were accomplished not by a decided superiority of intellect, but by a well-appointed military force, directed by a man of caution, firmness, and good common sense. What said Napoleon upon this subject? why, that the success of military operations depended upon *force*, not *genius*. Attila possessed an overwhelming force, and was therefore successful.

The *Malay* variety of the human race, like the Mon-

golian and the Caucasian, contains modifications, as well as variations in colour, from the light tawny tint, not deeper than that of the Spaniard, to a deep shade approaching to black. They are much inferior in form to the Caucasian variety, and may be regarded, in this respect, as the next in descent to the Mongolian tribes; and as their bodily conformation must be placed lower in the scale of animated nature, so also their cerebral development appears in precise correspondence, and consequently their intellectual manifestations are inferior in proportion. The head of the Malay is narrow; bones of the face large and prominent; nose full and broad towards the apex; mouth large.

“The inhabitants of the peninsula of Malacca, of Sumatra, Java, Borneo, Celebes, and the adjacent Asiatic islands; of the Molucca, Ladrone, Philippine, Marian, and Caroline groups; of New Holland, Van Diemen’s Land, New Guinea, New Zealand, and the numberless islands scattered through the whole of the South Sea, belong to this division.

“Under this variety, to which, in truth, no well-marked common characters can be assigned, are included races of men very different in organization and qualities—too different indeed to be arranged with propriety under one and the same division, but hitherto too imperfectly known for the purposes of satisfactory arrangement.”

The greater number of the various tribes of Malays are in a state of savage barbarism, while those divisions which have come in contact with Europeans have made advances in civilization, and we are told have improved in form and feature—no doubt from an introduction of European blood.

The *American* variety is scarcely superior to the Negro division of human nature. The forehead is low,

the eyes deep, the face broad, particularly across the cheeks, which are prominent and rotund. The mouth is large, and the lips rather thick. In this variety all the Americans are included, subject, perhaps, to trifling modification.

The imperfect development of the American forehead has been noticed by many accurate observers. Cooke says, "In the natives of Nootka Sound, the visage of most is round and full, and sometimes also broad, with high prominent cheeks; and above these the face is frequently much depressed, or seems fallen in quite across between the temples; the nose also flattening at its base, with pretty wide nostrils, and a rounded point; the forehead rather low." A similar depression of this region was observed by Hearne in the northern Indians; by Lewis and Clarke in the western tribes; by Humboldt in the Americans generally. Speaking of the Chaymas, he remarks, "the forehead is small, and but little prominent. Thus, in several languages of these countries, to express the beauty of a woman, they say that she is fat, and has a narrow forehead. The Chaymas have a great difficulty in comprehending anything that belongs to numerical relations. I never saw a single man that might not be made to say that he was eighteen or sixty years of age." The same circumstance was observed by Wafer, in the Isthmus of Darien: "The Indians attempted to reckon a party of between three and four hundred persons: one of them put a grain of maize into a basket for each that passed; but they could not cast it up. Some days after, twenty or thirty of the chief men came together and tried their skill. But when they could tell no further (the number probably exceeding their arithmetic), and seemed to grow very hot and earnest in their debates about it, one of them started up, and sorting out a lock of hair with his

fingers, and shaking it, seemed to intimate the number to be great and unknown, and so put an end to the dispute."

Cuvier seems to have been at a loss for the classification of the Red man among his various races of the human family; nor is this a matter of surprise, if we take into consideration the contact of the Europeans and the native Americans for more than three centuries, the complying disposition of the Indian female, and the ready acquiescence of the opposite sex to the temporary surrender of his connubial rights: hence so much white blood has been introduced into the veins of the various tribes of the copper-coloured race, that a genuine Indian, a true copy of the aboriginal prototype, is scarcely to be found! The missionaries eagerly visited the savages of the American continent; they spread themselves over the face of the country; and, while they affected to promulgate the precepts of the Divine Founder of Christianity, they did not fail to practise very extensively the rites of the Paphian Queen: like the Grand Seignior, they had their seraglio, but with this difference, that, while his jealous Sublimity encircled his precious charge by the walls of a feminine fortress, the libidinous range of the pious missionaries knew no limits but the boundless extent of the American forest. To spiritual exhortation, these *pious* men added carnal fruition; and under the pretext of administering *ghostly comfort* to the Indian maids and the squaws, they might be said not exactly to riot in the luxury of the Eastern harem, but to seek the gratification of their inordinate concupiscence in the innumerable wigwams of the deluded savages. Hence arose the not uncommon invitation of the Indian to the white man—"Go in and comfort my wife!" and it may be very truly observed, that if these voluntary self-elected preachers of the Gospel

failed in their attempts to illumine the mind of these children of nature with their spiritual doctrines, they were infinitely more successful another way—since they left behind them a decided improvement in features and personal conformation—too evident in the hybrid production of the saint and the savage to be for one moment mistaken.

And what has been the influence of the education imparted by the missionaries to the natives of America? Has the condition of the genuine savage experienced improvement from the exertions of these suspicious *preachers* of self-denial? or is it likely that these naked children of the wilderness, whose almost immeasurable inferiority of intellect cannot for one moment be doubted, would be able to comprehend the sublime mysteries of a religious dispensation, the interpretation of which has originated more than two thousand different opinions amongst its professed expounders? No; the track of the missionary has been marked with demoralization, misery, blood, and desolation! The same intolerant spirit which lighted the fires of Smithfield has immolated its victims all over the world! The Hindoo derisively smiles at the unsolicited, but importunate, exhortations of the raving missionary, and his efforts become impotent and unavailing on the Asiatic continent; but when this overbearing apostle made his way into the hut of the Sandwich Islander, the wigwam of the Indian, the kraal of the Hottentot, or the cabin of the Negro, the effect of his mission generally became conspicuous enough—conspicuous in fearful discontent—conspicuous in ferocious and sanguinary quarrels, as well as in a consequent decrease of population, and the general misery of the unfortunate beings over whom the intolerant fanatic had usurped a baneful, if not a hellish, authority.

If we glance at the general character of missionaries, we shall find that whatever may be their pretensions, they can lay no well-founded claim to the more amiable or better feelings of human nature, or yet to that superiority of intellect essentially requisite in the moral and religious direction of their fellow-creatures; on the contrary, they have generally sprung from very suspicious sources; and, if they render themselves remarkable, it is not for benignity of disposition, or loftiness of mind, but selfish cunning, and ignorant presumption. Some take pains to acquire a notion of the grammatical construction of the English language, and the rules of arithmetic; they contrive to commit to memory artificial signs, and endeavour to impress a notion upon the utterly untutored mind of their poor, miserably-unfortunate, deluded instruments, that they have acquired superior attainments; but, if we are to form our opinion from very extensive practical observation, as well as frequent opportunities of what may be called positive demonstration, we shall scarcely be able to give them credit for much acquaintance with the arts and sciences, for literary erudition, or that knowledge of sound philosophy the exercise of which is calculated to benefit those whom they profess to teach.

If the sincerity of the spiritual character be ambiguous, no doubt can be entertained as to that selfish sensuality in which the missionary uniformly endeavours to luxuriate, when he conceives himself screened from the prying eye of well-founded suspicion. No sooner has a man enrolled himself in the corps of these spiritual labourers (or rather spiritual sappers), and thus, as he conceives, enveloped himself in the sacred garb of religion, than he becomes more anxious for the gross enjoyments of self-indulgence than the mental improvement of his flock; and while he affects to preach the

Gospel, is frequently abstracted from the subject in the semi-contemplation of corporeal banqueting ! Who were the first to introduce ardent spirits amongst the aborigines of America ? Who but the missionaries ? The pious disciples, feeding upon fish and venison, and enjoying the highest luxuries afforded in the wigwams of an Indian village, added the hilarious excitement of rum to the simple feast of the savage : in this way, the latter imbibed his propensity, his unquenchable thirst, for this deleterious beverage, the indulgence in which, connected with corresponding causes, produced that acknowledged demoralization, and individual decrease, which bids fair, at no distant period, to extinguish the unadulterated race of Red men ! Where are now the Narraghansetts, who to the number of 12,000 peopled Rhode Island ? In what is now the small state of Maine, 11,000 Indians were formerly to be found ; while in New England were the tribes of the Massachusetts, the Pawtucketts, and the Pokanoketts, each nation consisting of several numerous tribes. A powerful nation supported themselves on the banks of the Connecticut river ; the Mohawks and the Five Nations inhabited the state of New York. The southern states were more populous : the Creeks, the Cherokees, and the Yamassees, inhabited Virginia, the Carolinas, and Georgia. The Delawares and the Shawanees lived in the Ohio territory. Where are they all now ? A few Creeks may be found at the back of Georgia, so much mingled, however, with white blood, that the genuine Indian is no longer to be perceived amongst them. A few Mohawks are to be found in Canada, as well as on the territory of the United States ; but out of 2,000,000 natives, computed to have been spread over the vast surface of North America, the number of those driven back, and struggling to maintain a lingering existence, are

supposed scarcely to amount to 200,000. Many nations have perished even in name. Savage life withers on the approach of civilization: wherever the white man sets his foot, the children of the forest fade before him, sink into nothingness, and become extinct! Such is the influence of that system of education which the daring European offers to his less enlightened fellow-creature!

That such must always be the case is too abundantly evident to need elaborate demonstration in this place; and as to what is called civilizing the savages, nothing can be more absurd, at least as far as relates to religious missions: the savage, inasmuch as his physiological organization is very inferior to that of the white man, is insusceptible of that superior degree of civilization for which the latter has been remarkable from the earliest periods to the present time; yet it does not hence result, that the condition of the former might not be much improved under judicious superintendence and direction, but very different means must be employed for this purpose than the introduction of ignorant and sinister missionaries, men who are as incapable of forming a due estimate of human character, as they are of taking an enlarged, or even an amiable, view of society in general—whose presence has uniformly proved the precursor of dissension and discord. The naked Indian, incapable of extending his views beyond the simple wants of his existence, is but very indifferently calculated (at least in the first instance) to receive even the fundamental principles of a system, on all hands acknowledged to be beyond the reach of human comprehension in its higher departments, and upon which so much diversity of opinion exists as to the minor consideration of external observance, and doctrinal exposition. Hence arises the abuse of the mild dispensation

of Christianity; and hence the savage is tortured by the various sects of missionaries till he can scarcely fail to despise the whole, and reject a system which admits of such startling anomalies or differences of opinion; which is converted to the basest purposes by designing knaves, who have contrived to spread themselves over the surface of the earth.

If the untutored children of nature are to receive benefit from the hand of the white man; if attempts are to be made to ameliorate their condition; to reclaim them from wandering in the forests, exposed to those sufferings which result from their precarious mode of existence, to the comforts of a settled abode; we must not commence with the mysteries of revealed religion and their almost innumerable diversity of sectarian interpretations; on the contrary, their first lesson or lecture should be on the simple arts of civilized life, rendered clear to their comprehension by the practical and progressive evidence of facts.

We have agitation enough amongst the various sectarians at home, without sending them to disturb the comparative happiness of the Indians; for, since such uncharitable feelings are cherished, such fierce contentions raised, where overbearing dogmatism supplies the place of calm reason and deliberate reflection, is it likely that the vermin-like swarms of lank-haired locusts, which are annually vomited from the European shores, can enlighten the religious darkness of the tribes of America—when they cannot agree amongst themselves, nor establish the truth of one single ramification of their conjectural hypotheses upon anything like demonstrative truth, leaving mathematical certainty out of the question?

I am positively astonished that any person capable of the least reflection should subscribe so small a trifle

even as the widow's mite towards missionary speculations; and above all, I feel surprised that many of our clergymen of the church establishment should lend their influence in the promotion of so unprincipled and so base a delusion—so gross a fraud upon the well-meaning liberality of that part of the public, who thoughtlessly contribute pecuniary assistance for the furtherance of an object which they are told by others will benefit their less enlightened, and consequently less fortunate, fellow-creatures. Are they culpably unwilling, or too carelessly indolent, to investigate before they sanction? The real object is scarcely concealed beneath the flimsy veil of sectarian hypocrisy; and therefore no extraordinary degree of sagacity or laborious investigation would be requisite to expose the base and fraudulent delusion.

I now come to the lowest class of human nature, the *Ethiopian* variety; which, like all the preceding classifications, will be found modified according to countries or circumstances. The skin and eyes are black; the hair black and woolly; the skull compressed laterally and thrown much behind; the forehead low, narrow, and retiring; the cheek bones prominent; the jaws projecting; the upper front teeth oblique; chin receding. The eyes are prominent; the nose broad, thick, flat, and confused with the extended jaws; the lips, and particularly the upper one, are thick.

The animal organization of the Negro is distinctly marked, and presents a striking contrast to the form of the white man. The head is thrown further behind, and the posterior part of the cranium overhangs the back, which appears hollow from the regressive or backward position of the shoulders. The arms are long, the thighs are ill-formed, the shins project, the

heels are long, and the leg appears, as it were, fixed in the middle of the foot. The Negro may be regarded as the descending link in the chain of nature which unites the human being to the brute creation.

From the accounts of Park, Edwards, and others, I have little doubt that the Foulahs sprung from the union of the Moors and the Negroes. They are not so black as their semi-brethren of the Gold Coast; their hair is not woolly, but crisp and bushy; their lips are not so thick, or their noses so flat; nor do their skins exude that peculiar fetid effluvium for which the jetty race is remarkable. The Eboes, from the Bight of Benin, according to Edwards, are the lowest and most wretched of all the nations of Africa.—“I cannot help observing, too, (says he,) that the conformation of the face, in a great majority of them, very much resembles that of the baboon.” Or, rather, he ought to have said, of the ouran-outang.

Intercourse with other nations has produced deviations from the original form and colour of the Negro or the Ethiopian, as we perceive exemplified in the Foulah; and therefore in forming our estimate of the character of this decidedly lowest and most inferior variety of the human race, due regard must be paid to any adventitious introduction of white or other blood. In the north of Africa, the aboriginal Berber tribes, and subsequently the Arabian conquerors, as well as the Phœnician, Greek, Roman, and Turkish colonists, must have mingled with the Negroes. On the east, the kingdom of Abyssinia, though at present professing the Christian religion, is of Arabian origin, and traces of the same people are found along the coast nearly as far as the Cape. Europeans, and the Portuguese in particular, have possessed settlements on the west coast of

Africa for several centuries. The result of such mixtures must not be confounded with the original bodily or mental characteristic of the Negro.

Inferior to the white man in beauty of proportion and strength of body, the genuine Negro is at the same time denied the acquisition of scientific attainments from a positive lack or insufficiency of mental capacity. I am well aware, that writers, particularly Stedman, have expressed a different opinion; but they were not sufficiently skilled in the elements and true principles of physiology to render their opinions preponderatingly important: as far indeed as relates to Stedman, I am not aware that a more weak or flimsy composition ever fell under my observation than his 'Account of Surinam.' Many of the Negro tribes, from the earliest periods to the present time, have been uniformly in the neighbourhood, frequently in the midst, of the most polished people or nations; yet, where are to be found monuments of their genius? Where, for instance, in Ethiopia can we meet with the most trifling memorial of their scientific attainments?—any specimen of mental conception which reminds the traveller of the towering capacity of the ancient Egyptians, their neighbours?

Where phrenologists place the seat or position of intellectual capacity in the human head, the Negro is remarkably deficient; his narrow, receding forehead affords very little space for the development of the perceptive or reflective organs; and, therefore, as he has been denied the faculties indispensable for scientific attainments, can he be expected to afford manifestations of a mental capacity which he does not possess? If we duly consider that cunning or sagacity which the Negro displays in procuring the means of subsistence, in avoiding danger, or attacking his enemies, we shall find, that if it be not more nearly allied

to what I will call the *instinct* of the brute, (lest I should alarm those timid beings who choose rather to receive the dogmas of bolder or more interested spirits than to inquire and decide for themselves,) it can scarcely be said to approach the sublime reasoning powers of the white man: the fact is, the Negro may be classed, on the score of mental capacity, precisely in the position pointed out by the inferiority of his animal conformation: in the latter respect, I have already observed, that he forms the descending link in the chain of nature which unites the human being to the brute creation; remarks precisely similar will apply to his mind, since the manifestations of the one will be found in exact correspondence to the development of the other.

In opposition to this doctrine, I shall be told, that a Negro named Hannibal was a colonel in the Russian artillery, and must therefore be presumed to possess considerable knowledge of mathematics; that Lislet, a Negro of the Isle of France, was named a corresponding member of the French Academy of Sciences, on account of his excellent meteorological observations; that Fuller, of Maryland, was an extraordinary ready-reckoner. Being asked in company, for the purpose of trying his powers, how many seconds a person had lived who was seventy years and some months old, he gave the answer in a minute and a half. On reckoning it up after him, a different result was obtained: "Have you not forgotten the ten leap years?" said the Negro. This omission was supplied, and the numbers then agreed with his answer. These would be offered as triumphant refutations of the inferiority of the Negro's mental capacity; but, then, were these specimens of partial intellect elicited by genuine Negroes? I am inclined to think not—in fact, I have no

doubt upon the subject: I feel convinced they were no such thing, but that they inherited some portion of white blood. The works of nature frequently proceed by laws which are placed beyond the reach of human investigation; yet we are able, with our limited faculties, to recognise sufficient evidence to prove that her well-directed operations do not always produce the same results. The mongrels or hybrids which I have just mentioned might retain the colour of the Negro, or as nearly so as possible, but the cerebral organization and mental capacity of the white man must have preponderated.

The influence of the male, in the procreation of the species, is, generally speaking, greater than that of the female; and thus a mulatto, from a white father, would be more beautiful in form, as well as more intellectual, than if the mother had been white. A quadroon (the produce of the white and the mulatto), whose sire and grandsire had been white, would be still more nearly allied to the Caucasian variety of the human race in bodily conformation and mental capacity; while, proceeding in a similar manner with the quadroon and the white man, the offspring, called a *mæsti*, will progress in improvement accordingly. The *samboe* is the production of the mulatto and the Negro; and if the progress be continued from the black male, the approaches to Negro inferiority of body and mind will be equally conspicuous. The instances of intellectual capacity, in what has been called the Negro, at which we have already glanced, I entertain not the least doubt were the offspring of the black and the mulatto; to which, however, with the colour and conformation of the Negro, a very considerable portion of the mental faculties of the white man had been conveyed. In short, the *samboe*, the mulatto, the quadroon, &c., will be found to possess intellectual power, and superior

bodily conformation, precisely in proportion to the preponderating influence of the blood of the white man.

Physiological results are highly interesting, and particularly from those diversities which are not of uncommon occurrence, and which are generally called freaks of nature. For instance, in breeding dogs for the gun, I have sometimes been surprised by a pointer bitch producing a setter whelp (amongst a number of pointer puppies), when I could trace the pedigree free from admixture for many previous generations. When a strain of different blood is introduced, it is not easily washed out or obliterated, but will, in the propagation of the whole circle of nature, frequently appear in the manner I have just described. Nor is this all; how often do we see the progeny approximate more nearly the sire than the dam, and *vice versâ*?—in others, inherit the mental capacity of the father with a much more impressive personal likeness of the mother, and the contrary? Darwin, it is true, entertains a different opinion upon this subject, and seems to think that the likeness of the offspring results from the male; and it must be confessed his hypothesis is ingenious and interesting: but it has not been borne out by that incontestable criterion, the evidence of facts. However, under every view of the case, the specimens of black talent above mentioned amount to nothing in regard to the genius of the Negro race, unless proof could be obtained that no admixture of superior blood had ever been introduced.

Instances similar to those brought forward might be numerous produced. In 1734, H. A. W. Amo, an African from the Gold Coast, took the degree of Doctor at the University of Wittenberg, and, it is said, displayed extensive and well-digested reading in the philological literature of that period. Ignatius Sancho and Gustavus Vasa, the former born in a

slave-ship, and the latter in the kingdom of Benin, distinguished themselves as literary characters in this country in modern times. But here again the same objection forces itself upon the mind.

The Methodist missionaries have tried the experiment of educating the Black, so as to enable him to preach the Gospel, and to promote their worldly interest amongst the sable brethren: but their efforts have not been eminently successful. After a tedious probation, they have deemed some of the Negroes qualified for the pastoral office; have sent them, as missionaries, to Africa; and these persons have in general exchanged the scriptural dispensation which they had received from their wily instructors, for the faith of their countrymen, and re-assumed their mode of life.

The poor inoffensive Hottentots were favoured with the visits of these Methodist missionaries, these demure, lank-haired, *soi-disant* followers of the first apostles of Christianity; but the sultry atmosphere of Southern Africa, it would seem, did not agree with their constitutions, as they seldom made a long stay in that part of the world: nor have they made much progress amongst the natives in the business of conversion. Campbell, whose miserable account of his mission was published some years ago, was evidently anxious to return home the first opportunity which he could decently embrace: the *luxuries* of a Hottentot kraal were not relished by him; and, though he might form a seraglio as extensively numerous as he could desire, he grew tired of complying beauty, nor would the charms of the sable Venus herself have induced him to remain permanently in this part of the world.

If we wish to look for the very natural effect of that education imparted by the Methodist missionaries to

the Negroes, we have but to direct our attention to the West Indies, where it may be traced in bloodshed, murder, and desolation! What gave rise to the insurrectionary horrors of Demerara, a few years ago, but the mischievous and irreligious instigation of fanatical and ferocious missionaries?—What originated the havoc, the senseless destruction of property, the terrific conflagration and revolting massacres of Jamaica? The same inordinate desires, the same demon-like feelings, operated in both cases.

Next in review comes Negro Emancipation—a measure, the origination of which, however creditable it might be to the commiserating feelings of Wilberforce, was by no means honourable to his perceptive faculties or his understanding: the same observation will apply to those who have pursued and ultimately completed the measure, as far at least as relates to legal enactment. We must wait for the sequel: they have proceeded upon the principle that the Negro and the white man are equal in everything but colour; that the personal form of the latter is not superior to that of the African, nor has he the least well-founded pretensions for the claim of higher intellectual capacity. A more erroneous doctrine, or a system more pregnant with mischief and misery, was never promulgated! In the same species of the brute creation, varieties are continually presented; why, then, should we hesitate to admit in the human being that diversity which is observable throughout animated nature, in beautiful accordance no doubt with the divine system, which is placed beyond the reach of our wisely-limited faculties?

The abolition of the slave trade found many unreasonable, senseless advocates. I give the following as a specimen:—In the early part of the year 1833, I happened to be at the Blossoms Inn, Chester; I made one

of seven who were breakfasting in the Commercial Room. The conversation turned upon Negro emancipation, when I made a few observations in the same feeling as those which precedingly appear; I was fiercely contradicted by a person directly opposite, who insisted that the only difference between the sable race and the white variety of human nature, was the colour of the skin, and “perhaps (said my antagonist) the Blacks may have rather thicker lips.” I asked him if he should feel any objection for his daughter to enter into a matrimonial connexion with one of those beings whose cause he so impetuously advocated, supposing the latter possessed ample means to procure for her the comforts of life?—when he paused, he wriggled, dropped his nether lip, but made no reply: thus tacitly admitting the wide distinction of the two races which he had been so insultingly anxious to identify.

Let it not, however, be supposed, that, because I do not approve of the principle upon which the administration of the country proceeded for the abolition of the slave trade, I am therefore opposed to a measure of Negro emancipation founded upon a physiological basis, and consistent with reason and justice. That one man ought not to hold another in bondage cannot be denied as a general principle; but as far as relates to slavery in the West Indies, the question ought to have been more calmly and more philosophically considered, more deliberately viewed in all its bearings, ere the Legislature passed that unwise enactment, which can scarcely fail to produce the most disastrous consequences to the very beings whose condition its professed object was to ameliorate and improve. I am well aware that this doctrine was not listened to by those ignorant brawlers, to whom Wilberforce acted the part of a political pioneer, but it is not the less judicious on that account; nor have I the

least doubt that the result of the measure of emancipation will be disasterously different from the inconsiderate predictions of its more honest and conscientious promoters.

Before I proceed further in the examination of the subject, I will quote the opinion of that great naturalist and sound philosopher, Cuvier, upon the varieties of the human species, and the physiological characteristics by which they are so distinctly marked, and in which the Negro race forms a conspicuous, if not a leading, feature.

“ Three of the varieties of human nature are eminently to be distinguished from each other—the White or Caucasian, the Yellow or Mongolian, the Negro or Ethiopian. The Caucasians, to which we Europeans belong, is remarkable for the beautiful oval form of the head, and from it have proceeded those people who have attained the greatest civilization, and have held dominion over the rest. It varies in complexion, and the colour of the hair. The Mongolian is recognised by its prominent cheek bones, flat face, narrow oblique eyes, straight black hair, scanty beard, and olive tint. From it have arisen the great empires of China and Japan, and by it some great conquests have been achieved; but its civilization has always remained stationary. The Negro race is confined to the south of the Atlas chain: its complexion is black, hair woolly, skull compressed, nose flattened, muzzle projecting, lips thick, and *it nearly approaches the monkey*. The natives which compose it have always remained in a comparatively barbarous state.

“ The Caucasian race is subdivided into three great branches, and is supposed to have had its origin in that group of mountains situated between the Caspian and the Black seas. The Syrian branch spread to the south, and produced Assyrians, Chaldeans, Arabs, Phœnicians,

Jews, Abyssinians, and probably Egyptians. From this branch, always inclined to scepticism, have arisen the religious doctrines most generally adopted. Sciences and letters have sometimes flourished among them, but always under some strange shape, or in some figurative style. The Indian, German, or Pelasgic branch took a still wider range, and the affinities of its four principal languages are more multiplied. The Sanscrit, which is still the sacred language of the Hindoos, is the parent of most of the Hindostanee tongues. The Pelasgic was the source whence came the Greek, Latin, and the present dialects of the south of Europe; the Gothic or Teutonic, whence are derived the north and north-west languages, such as German, Dutch, English, Danish, Swedish, and other varieties; and lastly, the Sclavonic, whence came the languages of the north-east, viz., the Russian, the Polish, the Bohemian, and the Vendean. It is this great and respectable branch of the Caucasian race which has carried philosophy, science, and art to their present perfection, and of which it has been the depository for thirty centuries. The inhabitants of the north, such as the Samoyedes, the Laplanders, and the Esquimaux, come, according to some, from the Mongolian race, and according to others they are the degenerated offspring of the Scythians. The Americans cannot be clearly brought back to either of our races of the Old World; and yet, nevertheless, they do not possess a sufficiently precise character to form a distinct race. The copper complexion is far from being enough; their black hair and their beard would approach them to the Mongolian, if their differently marked features did not oppose this idea. Their languages are as numerous as their nations; and no one has yet been able to seize on demonstrative analogies between themselves, or between them and the inhabitants of the ancient continent."

If, then, the Negro, by the unerring wisdom of Providence, has been placed in the lowest degree of human nature, removed to an immeasurable distance from the white man, can anything be more ridiculous than the futile attempt to elevate him to a station in society for which he was not intended, and which he is physically and mentally incapable of attaining? As in the decided inferiority of his form, and even in the very tone of his voice, he recedes from the superior classes of the human species, and particularly from the Caucasian variety, so in his disposition, his feelings, his wants, and his propensities, he approaches the brute creation precisely in the same manner. In his own country, we find him the same as he has ever been—the naked savage. Depending on precarious means for subsistence, he sometimes riots in abundance, and at others experiences the keenest sensations of want. Incapable of appreciating the lofty sentiments which so distinctly mark civilized from savage life, we find him revengeful, cowardly, and cruel, qualities strikingly illustrated in the following recital:—

In 1804, the 3rd Ceylon Regiment was raised, consisting of Caffres, procured by the instrumentality of Portuguese agency, through the island of Mosambique from Caffraria. It being found very difficult to communicate any rational notions to them, the name of each was written on a label, and tied round his neck; nor was it without the most persevering industry they were brought to an approximation of order and discipline. On the 17th of February, 1809, a detachment of these men formed the advanced guard of a body of troops under the orders of the Hon. Colonel St. Leger, at Travancore. They fell in with a party of the enemy at the village of Agrecoil, and were ordered to charge: they would not however advance, but mani-

fested the most unequivocal symptoms of cowardice. The enemy kept firing, and the Caffres fell; still the latter refused to advance: in vain their officers urged—in vain Colonel Morice endeavoured to excite them to action, by whirling his hat on the point of his sword, and advancing some score yards before them!—they could not be moved, till the approach of some English troops compelled the enemy to fly, when the Africans rushed, like yelling tigers, to indiscriminate slaughter! Less anxious to pursue their armed opponents than riot in blood, they massacred the inoffensive villagers, infants, &c. An innocent old man, pursued by some of these savages, threw himself into the arms of a British officer for protection—the latter kept them at bay with his sword, and threatened the Caffres with instant death if they molested the unoffending and venerable native: the humane officer (Lieutenant Brown) found himself under the necessity of advancing; and before he had proceeded fifty paces, had the mortification to behold the object of his solicitude pinned to the ground with at least a dozen bayonets! The same officer, a few minutes afterwards, observing several of the Caffres about to enter a cottage, and suspecting the consequence, ran with all possible speed towards the place, which contained three old women; when, horrible to relate, they had killed two, and were in the act of thrusting their bayonets into the eyes of a third! Many similar circumstances took place, nor was it possible for their officers to prevent these horrid deeds. In fact, their whole conduct was what might naturally be expected; and, by way of finale to the dreadful tragedy, they smeared their bayonets with blood, and, with hideous howling, danced round their colonel, manifesting every symptom of barbarous and savage exultation!

The Negroes are cowardly and cruel; they endure

suffering and torture with surprising indifference. I copy the following from Stedman's 'Account of Surinam,' which shows that the Dutch were not the most tender-hearted taskmasters in the world:—"Not long ago, I saw a black man suspended alive from the gallows by the ribs, between which, with a knife, was first made an incision, and then clinched an iron hook with a chain: in this manner he kept alive three days, hanging with his head and feet downwards, and catching with his tongue the drops of water (it being the rainy season) that were flowing down his bloated breast. Notwithstanding all this, he never complained, and even upbraided a Negro for crying while he was flogged below the gallows, by calling out to him—"You man? are you a man?—you behave like a boy!" Shortly after which he was knocked on the head by the commiserating sentinel who stood over him, with the butt end of his musket. Another Negro I have seen quartered alive; who, after four strong horses were fastened to his legs and arms, and after having had iron sprigs driven home underneath every one of his nails on hands and feet, without a motion, first asked for a dram, and then bid them pull away, without a groan. But his jokes, under such circumstances, were still more surprising: he desired the executioner to drink before him lest there should be poison in the glass, and requesting him to take care that none of the horses struck backward!"

Edwards, in his account of the West Indies, gives us an example of fortitude and contempt of death evinced by two Negroes, who, as a punishment for revolt, were hung alive in chains: one died on the eighth, the other on the ninth day, without having uttered a groan or complaint.

But to return to the more immediate object of West

India slavery. If we glance at that part of Africa from which the slaves were procured for our transatlantic plantations, we shall find the country divided into a number of petty states, under the despotic governance of so many natives, who, possessing (themselves or their progenitors) superior cunning to their sable brethren, have contrived to raise themselves to absolute power. While these tyrants are enabled to wallow in the luxuries of savage life, their subjects linger out a miserable existence amidst the extremes of want and general deprivation. Nothing can be more deplorably wretched, at least in the estimation of an European, than the life to which these unfortunate Africans are constrained to submit: unconscious of the finer feelings of human nature, nothing is observable on the score of affection, except the sympathetic tenderness of the female for her offspring—which we see as strongly exemplified in the tiger and in all ferocious animals.

Like their more polished kingly brethren, the jetty sovereigns of these burning regions frequently quarrel with each other; but, unlike the custom of the former, they put their prisoners to death, and that too in the most horrible manner, unless a market be offered where they can be bartered for such commodities as are adapted to the wants, or please the fancy, of the savage captor. The importation, therefore, of the swarthy children of Africa to the West Indies, not only saved the lives of the miserable victims of war, but infinitely bettered their condition also: for surely no person will be mad enough to contend, that the Negro in the British plantations, well fed, comfortably sheltered, well taken care of in every respect, and with only an easy task, or rather a very moderate proportion of labour, to perform, is not much better situated, than when, in his own country, he was subjected to every

privation, and his life continually exposed to the whim or the caprice of an unreflecting and brutal tyrant! I hear the advocates of unqualified abolition vociferating the blessings of liberty in my ear; let them point these out in the native country of the Blacks—let them demonstrate the freedom enjoyed in Bonny or Old Calabar, which was not obtainable in a much greater degree in the West Indies: nor have I the least doubt it will be found, that these Africans are incapable of estimating the liberty provided for them by the Emancipation Bill, and therefore very ill calculated to enjoy it.

I shall be reminded of the cruelties inflicted by the planters on the slaves, as well as the restraint and privation to which the latter were subjected on their passage from the African continent to the British possessions; and, as no institutions are faultless, I willingly admit that irregularities may have frequently occurred—that which was intended for salutary correction, sometimes degenerated into cruelty. But I cannot credit one-tenth part of the reports which have been so industriously circulated on this subject. Let it ever be kept in mind, that the planter, by maiming or killing a Negro, was committing a serious injury on his own property; and, as self-interest forms a predominant feature in the human character, and is particularly laid to the charge of the cultivators of the West India Islands, it is not very probable that men, such avaricious men as they have been represented by their enemies, would commit very extensive depredations on themselves. As to the transactions in the settlements of the French, the Portuguese, or the Dutch, partial cruelties have been inflicted, I have no doubt; but the relation of such proceedings, when transmitted by such ignorant and incompetent authorities as Stedman, should be re-

ceived with due allowance. An air of improbable and ill-digested romance pervades much of this gentleman's clumsily constructed verbiage; some parts will evidently not endure the test of investigation; while, enraptured with the charms of his swarthy Joanna, he could observe nothing but exquisite beauty in the "sooty sultanas" of Surinam!—nothing but the loftiest sentiments in the receding frontal of the savage—nothing but the exquisiteness of fine and manly proportions in his vastly inferior physical conformation!—*Bah!*

Whatever might have been the situation of the Negroes in our plantations, little, if any, discontent was evinced by them till they became contaminated by the blighting breath of missionaries. They were conscious, in fact, of having exchanged a state of uncertainty, starvation, and peril, for plenty and protection; but when they were instigated to uneasiness by wily knaves, (and can there be a more hideous monster than a religious hypocrite?) they began to murmur, at length to rebel; and most of, if not all, the punishments inflicted on them, which assumed a cruel character, were brought on by that refractory and sanguinary spirit which had been imparted by their self-appointed, unsolicited *religious instructors!*—Such is the influence, or rather the effect, of that system of education upon which the missionaries proceed, and in which, on the score of numbers, and perhaps of sinister and baneful zeal, the Methodists appear pre-eminently conspicuous!

The Negro, naturally lazy, cowardly, and cruel, with a meagerness of mental capacity corresponding with his physical inferiority, requires a degree of restrictive control in his connexion with the whites, as well for his own comfort, as for the safety of his employers; and if, in the service of the British planter, he experienced not the perfection of existence of which he is susceptible, it

will be a difficult task to find another station in which he would be able to enjoy half so much sterling good: I feel well assured the legal enactment for his unlimited freedom will not enable him to reach his millennium.

As I commenced my observations with the highest variety of the human race, and descended the chain consecutively, I must invert the method and retrace my steps in order to give an opportunity for those illustrations which the requisite elucidation of the subject imperiously demands.

CHAPTER II.

The Aborigines of America.—The White Man never known to exist in a Savage State.

WE have been frequently told of the extraordinary sagacity evinced by the Indians in making their way through the pathless wildernesses of that immense country to any given place with which they had not been previously acquainted, but had only received the scanty information of the direction in which it lay, or, as a nautical man would express it, of its bearings, by observing the operation of the wind on the bark of the trees, &c. We have further been told of their swiftness in running, the great distances they are able to travel, of their muscular or bodily strength; their almost mysterious faculty of tracing the footmarks of their enemies when not the slightest impression appears cognizable by the perception of the white man;—these and other Indian characteristics have been given us, as if they were unattainable by any other class of beings. The distinguishing features in the habits of the Red men have received an air of romantic astonishment from that predisposition in the human mind to revel and luxuriate in relations of the marvellous: hence ‘Robinson Crusoe’ and ‘Philip Quarll’ became the greatest possible favourites with *children in mind* as well as children in years; hence the ‘Monk’ obtained an undeserved celebrity; hence the wretched trash of Mrs. Ratcliffe became palatable in the highest degree! hence the ‘Victim of Magical Delusion’ was tolerated, as well as hundreds of absurdities equally gross and equally

contemptible; and hence the outrageous Oriental hyperbole of the 'Arabian Nights' has passed through a countless number of editions.

With regard, however, to the feats of speed, of dexterity, of strength, of sagacious perception evinced by the Indians, they are evidently the result of practice. It is well known the arm of the smith increases in muscular power from the constant use of the hammer: so the Indian, born in the forest, depending upon his success in the chase as a means of subsistence, is initiated as early as possible into the mysteries of a profession which his mode of life, and indeed his very nature, constrains him to pursue ever afterwards. Yet these peculiarities for which the Indian is distinguished, and for which he receives so much credit from his wonder-loving white brother, are not only attainable by the latter, but, inasmuch as he is superior in strength of body, and mental capacity, presenting altogether a much finer model of human nature, practice enables him to excel the naked savage in those very qualities in which the latter has been thoughtlessly supposed to be pre-eminent. Of the truth of this assertion, the backwoodsmen may be mentioned as incontestable illustrations: the present Colonel David Crockett, member of the American Congress, but celebrated more for his feats as a wild hunter than for the sublimity of his orations as a legislator, is a living, if not an illustrious, sample. These qualities, however, and the methods by which they are manifested, serve to prove the principle upon which I have proceeded, viz., the physiological inferiority of the Indian, and his consequent approximation to the lower orders of animated nature. I am willing to admit that his modes of operation frequently appear surprising, of which the following is a specimen.

As we are now speaking of the native Americans, the

following singular adventure of a British soldier, in a campaign in North America, may not be thought uninteresting.

“ In the year 1779, when the war with America was conducted with great spirit upon that continent, a division of the British army was encamped on the banks of a river, and in a position so favoured by nature, that it was difficult for any military art to surprise it; war in America was rather a species of hunting than a regular campaign. ‘ If you fight with art (said Washington to his soldiers) you are sure to be defeated. Acquire discipline enough for retreat, and the uniformity of combined attack, and your country will prove the best of engineers.’ So true was the maxim of the American general, that the English soldiers had to contend with little else. The Americans had incorporated the Indians into their ranks, and had made them useful in a species of war for which their habits of life had peculiarly fitted them. They sallied out of their impenetrable forests and jungles, and with their arrows and tomahawks committed daily waste upon the British army, surprising their sentinels, cutting off their stragglers, and even when the alarm was given, and pursuit commenced, they fled with a swiftness that the speed of cavalry could not overtake, into rocks and fastnesses whither it was dangerous to follow them.

“ In order to limit as far as possible this species of war, in which there was so much loss and so little honour, it was the custom with every regiment to extend its outposts to a great distance beyond the encampments, to station sentinels some miles in the woods, and keep a constant guard round the main body.

“ A regiment of foot was at this time stationed upon the confines of a boundless savanna. Its particular office was to guard every avenue of approach to the

main body; the sentinels, whose posts penetrated into the woods, were supplied from the ranks, and the service of this regiment was thus more hazardous than any other. Its loss was likewise great. The sentinels were perpetually surprised by the Indians, and were borne off these stations without communicating any alarm, or being heard of after.

“ Not a trace was left of the manner in which they had been conveyed away, except that, upon one or two occasions, a few drops of blood had appeared upon the leaves which covered the ground. Many imputed this unaccountable disappearance to treachery, and suggested as an unanswerable argument, that the men thus surprised might at least have fired their muskets, and communicated the alarm to the contiguous post. Others who could not be brought to consider it as treachery, were content to receive it as a mystery which time would unravel.

“ One morning (the sentinels having been stationed as usual over night) the guard went to relieve a post which extended a considerable way into the wood. The sentinel was gone! The surprise was great, but the circumstance had occurred before. They left another man, wishing him better luck. ‘ You need not be afraid (said the man), I shall not desert!’

“ The sentinels were replaced every four hours, and, at the appointed time, the guard again marched to relieve the post. To their inexpressible astonishment the man was gone! They searched round the spot, but no trace of his disappearance could be found. It was necessary that the station, from a stronger motive than ever, should not remain unoccupied; they were compelled to leave another man, and returned to the guard-house. The superstition of the soldiers was awakened, and terror ran through the regiment. The colonel, be-

ing apprized of the occurrence, signified his intention to accompany the guard when they relieved the sentinel they had left. At the appointed time they all marched together, and again, to their unutterable wonder, they found the post vacant, and the man gone!

“ Under these circumstances, the colonel hesitated whether he should station a whole company upon the spot, or whether he should again submit the post to a single sentinel. The cause of these repeated disappearances of men, whose courage and honesty were never suspected, must be discovered; and it seemed not likely that this discovery could be obtained by persisting in the old method. Three brave men were now lost to the regiment, and to assign a fourth, seemed nothing less than giving him up to destruction. The poor fellow whose turn it was to take the station, though a man in other respects of incomparable resolution, trembled from head to foot.

“ ‘ I must do my duty (said he to the officer), I know that; but I should like to lose my life with more credit.’ ”

“ ‘ I will leave no man (said the colonel) against his will.’ ”

“ A man immediately stepped from the ranks, and desired to take the post. Every mouth commended his resolution: ‘ I will not be taken away alive (said he), and you shall hear of me on the least alarm. At all events, I will fire my piece if I hear the least noise. If a crow caws or a leaf falls you shall hear my musket. You may be alarmed when nothing is the matter, but you must take the chance as the condition of the discovery.’ The colonel applauded his courage, and told him he would be right to fire upon the least noise which was ambiguous. His comrades shook hands with him, and left him a melancholy foreboding. The company marched back and waited the event in the guard-house.

An hour had elapsed, and every ear was upon the rack for the discharge of the musket, when upon a sudden the report was heard. The guard immediately marched, accompanied as before by the colonel of the regiment. As they approached the post, they saw the man advancing towards them, dragging another man on the ground by the hair of the head. When they came up to him, it appeared to be an Indian whom he had shot. An explanation was immediately required.

“ ‘ I told your honour (said the man) that I should fire if I heard the least noise: the resolution I had taken has saved my life. I had not been long on my post when I heard a rustling at some distance: I looked, and saw an American hog, such as are common in the woods, crawling along the ground, and seemingly looking for nuts under the trees and among the leaves. As these animals are so very common, I ceased to consider it for some minutes; but being on the constant alarm and expectation of attack, and scarcely knowing what was to be considered a real cause of apprehension, I kept my eye vigilantly fixed upon it, and marked its progress amongst the trees: still there was no need to give the alarm, and my thoughts were directed to danger from another quarter. It struck me, however, as somewhat singular to see this animal making, by a circuitous passage, for a thick coppice immediately behind my post. I therefore kept my eye more constantly fixed upon it, and as it was within a few yards of the coppice, hesitated whether I should not fire. My comrades, thought I, will laugh at me for alarming them by shooting a pig! I had almost resolved to let it alone, when, just as it approached the thicket, I thought I observed it give an unusual spring. I no longer hesitated; I took my aim, and discharged my piece; and the animal was stretched before me with a groan that I conceived to be that of a

human creature. I went up to it, and judge my astonishment when I found that I had killed an Indian! He had enveloped himself with the skin of one of these wild hogs so artfully and completely, his hands and feet were so entirely concealed in it, and his gait and appearance was so exactly correspondent with that of the animals, that, imperfectly as they were always seen through the trees and jungles, the disguise could not be penetrated at a distance, and scarcely discovered upon a nearer aspect. He was armed with a dagger and a tomahawk.'

"Such was the substance of this man's relation. The cause of the disappearance of the other sentinels was now apparent. The Indians, sheltered in this disguise, secreted themselves in the coppice, watched the moment when they could throw it off, burst upon the sentinels without previous alarm, and, too quick to give them an opportunity to discharge their pieces, either stabbed or scalped them, and bore their bodies away, which they concealed at some distance in the leaves. The Americans gave them rewards for every scalp of an enemy which they brought. Whatever circumstances of wonder may appear in the present relation, there are many now alive who can attest its authenticity."

Speeches have been frequently wafted to us from the other side of the Atlantic, said to be the oracular compositions of Indians, some of which for loftiness of conception, and power of expression, would appear beyond the reach of their capacity; they remind me rather of the inflated and impassioned eloquence of the sister kingdom, than the vernacular emanations of the American forest. The speech attributed to the Mingo chief, Logan, is remarkable; it is interesting, and I will quote it:—

"I may challenge the whole orations of Demosthenes and Cicero, and of any more eminent orator, if Europe has furnished more eminent (says Mr. Jefferson), to

produce a single passage superior to the speech of Logan, a Mingo chief, to Lord Dunmore, when governor of this state. And as a testimony of their talents in this line, I beg to introduce it, first stating the incidents necessary for understanding it. In the spring of the year 1774, a robbery and murder were committed on an inhabitant of the frontiers of Virginia, by two Indians of the Shawanee tribe. The neighbouring whites, according to their custom, undertook to punish this outrage in a summary way. Colonel Cresap, a man infamous for the many murders he had committed on those much injured people, collected a party and proceeded down the Kanhaway in quest of vengeance. Unfortunately a canoe of women and children, with one man only, was seen coming from the opposite shore unarmed, and unsuspecting a hostile attack from the whites. Cresap and his party concealed themselves on the bank of the river, and as the canoe reached the shore singled out their objects, and at one fire killed every person in it. This happened to be the family of Logan, who had long been the distinguished friend of the whites. This unworthy return provoked his vengeance. He accordingly signalized himself in the war which ensued. In the autumn of the same year, a decisive battle was fought at the mouth of the Great Kanhaway, between the collected forces of Shawanees, Mingo,es, and Delawares, and a detachment of the Virginian militia. The Indians were defeated and sued for peace. Logan, however, disdained to be seen among the supplicants. But, lest the sincerity of a treaty should be distrusted, from which so distinguished a chief absented himself, he sent by a messenger the following speech to be delivered to Lord Dunmore:—‘I appeal to any white man to say, if ever he entered Logan’s cabin hungry, and he gave him not meat; if he came cold and

naked, and he clothed him not. During the course of the last long and bloody war, Logan remained idle in his cabin, an advocate for peace. Such was my love for the whites, that my countrymen pointed as they passed, and said, "Logan is the friend of white men!" I had even thought to have lived with you, but for the injuries of one man. Colonel Cresap the last spring, in cold blood, and unprovoked, murdered all the relations of Logan, not sparing even my women and children. There runs not a drop of my blood in the veins of any living creature. This called on me for revenge. I have sought it, I have killed many; I have fully glutted my vengeance. For my country, I rejoice at the beams of peace. But do not harbour a thought that mine is the joy of fear. Logan never felt fear. He will not turn on his heel to save his life. Who is there to mourn for Logan? Not one!"

Can any person of common sense calmly consider the preceding oration, and believe it to be the spontaneous production of an untutored savage—of a being incapable of the indispensable attainments for the composition of so forcibly expressive (if not sublime) a specimen of eloquence?

Amongst the Creeks has been found ability sufficient to reduce or model their dialect to the rules of grammatical construction, and a newspaper is printed in it for their use. But who are these modern Creeks?—of what materials are they composed? Do they present the exact physiological resemblance of the aborigines—of the ancient and unquestionable prototype? No. They are become a different race of beings: the genuine Creek blood can no longer be found; what remains of it has been improved by copious draughts from higher sources, and in the veins of the remnant of people called the Creeks, the blood of the white man

will be found copious and prevailing. Having already noticed the numerous and inviting opportunities presented to the latter for admixture with the Indians, it will only be necessary in this place to draw the attention of the reader to the intimate connexion of the Creeks with their white neighbours for more than a century, as well as their present locality (close to the Georgians), and the truth of what I have stated becomes more than probable.

At the latter end of the year 1834, we were favoured by the visit of a Michigan chief, who, after exhibiting his skill in the use of the rifle to the inhabitants of Liverpool, came to the metropolis for the same purpose. He was engaged by Mr. Glossop, and made his appearance at the Victoria and the Strand theatres: a little interlude was prepared for the performance of the stranger in a theatrical manner, in which, however, the principal interest consisted in the chief hitting an apple held by a person's fingers (not *in* the hand) with a ball from his rifle—a circumstance which evinced the confidence of both parties. This was all very well in its way; the Canadian proved himself an excellent marksman; he had acquired that steadiness of position (which, however, he rendered more secure by a rest, formed with an arrow from his hip, calculated to escape casual observation), that degree of corresponding sympathy between the eye and the finger, which enabled him unerringly to accomplish the object. The excellence of shooting with the rifle, like the excellence of throwing the fly by the fisher, can only be attained by the acquisition of a corresponding degree of sympathy between the eye and finger, sight and touch; a principle further illustrated by the use of the bow and arrow, and this the Indian chief possessed in an eminent degree. I was anxious for a more intimate ac-

quaintance with him than that which was offered by his theatrical exhibition, and therefore, in the month of January of the present year (1835), I visited him at his domicile in Waterloo Road.

On entering the apartment of this interesting American, he advanced, and took me by the hand after the European fashion. But what stood before me? Not a genuine Indian, but a well-formed man, about five feet eight or nine inches high, with a countenance, the features of which were well developed, and in which the very influential preponderance of the intelligent white variety of the human race was conspicuously evident. His interpreter being absent, I felt at a loss for a medium of oral communication; but recollecting from the early settlements of the French in Canada that their language had become somewhat general in that part of the American Continent, I addressed him in it, which he understood, and thus I contrived to image my thoughts to his mind, and to carry on a little conversation. I expressed a wish to examine the instrument with which he performed the apple feat on the stage, his rifle, and he immediately presented it to me. An American gunsmith's name appeared on the locks, but I suspect it was of English manufacture nevertheless; at all events, it was composed of the best materials, ornamented with silver mounting, and altogether a superior instrument or engine: it was discharged by the flint lock, the hammer-spring of which was too weak. I drew his attention to this circumstance, when he informed me that he was about to have the lock altered to the percussion principle, when no hammer-spring would be requisite.

In the course of conversation, I found he was well acquainted with the proper method of loading and the use of the rifle; but when I remarked that the barrel

(which was four feet in length) would shoot much stronger, or drive the ball with much greater force, if shortened one-half, the doctrine seemed to startle him, if not to unhinge all his previous notions on the subject. He listened attentively to the following observations:—I remarked, that the ball should quit the muzzle of the piece the very instant the powder, by combustion, had acquired its greatest force or power of propulsion; for, if it has still further to struggle up the tube at this period, its progress is opposed by the lateral friction of the interior surface of the barrel, as well as the atmospheric air in front; whereas, if the ball had left the muzzle at the period just mentioned, it would be freed from its frictional struggle, and its flight retarded only by the atmosphere; and that the gunpowder has acquired its greatest elastic force before the ball can struggle to the top of the barrel of a rifle, not the least doubt can be entertained—at least no doubt is entertained by me, since, by experiment, many times repeated, I have ascertained the fact. To this reasoning, he could only oppose dogmatical custom. I am well aware it is the custom of the Americans generally, Indians, and backwoodsmen, and others, to make use of rifles much longer than is compatible with the full force of the discharge, and I am equally well aware that, as marksmen, they are unequalled; which amounts to this, that in theory they are far behind the inhabitants of this country, while incessant practice has made ample amends for the deficiency.

Before I quitted Muc Coonce, his interpreter arrived, accompanied by three Indians; when I found their dialect to be a mixture of the Indian tongue and Canadian French, in which the latter evidently was the most influential. The three Indians were inferior in personal appearance to the chief; they were neither so

tall, so well proportioned, nor so handsome: they were more nearly allied to the genuine aborigines; and a similar remark is applicable to a female of their tribe who was in the room.

The physical and mental inferiority of the aborigines of America was very soon discovered by the Spanish adventurers who visited the New World shortly after its discovery by Columbus. The first settlement of any consequence formed by the Spaniards in the western hemisphere was at Hispaniola, afterwards called St. Domingo, and which at present forms the sable republic of Hayti, the name by which this large island was distinguished by its original possessors. Gold mines were discovered in Hispaniola; and the natives being compelled by the Spaniards to perform the requisite labour of working them, sunk beneath a task to which the strength and vigour of a European was more than equal. However, the unfeeling taskmasters compelled the natives, whom they had robbed of their country, and reduced to slavery, to proceed in the laborious occupation, till, in the course of a very few years, they were numerically reduced from 1,000,000 to 60,000! Las Casas, a priest of the Dominican order, who visited Hispaniola as a missionary, loudly declaimed against the cruel treatment which the unfortunate natives experienced at the hands of their oppressors, an account of which he transmitted to the Spanish government, and shortly afterwards returned to Europe to lay his well-founded complaint personally before Cardinal Ximenes, who at this period acted as a sort of viceroy in Spain, immediately prior to the Emperor Charles V. assuming the crown of that country. Ximenes listened with attention to the representations of Las Casas, and felt every disposition to emancipate the unfortunate Americans from the relentless and cruel slavery to

which they had been so barbarously subjected by his countrymen ; but as, on the other hand, the most strenuous remonstrances were made to him by the persons interested in working the mines, in which the labour of the Indians was represented as indispensable, he, like a sound politician, appointed three superintendents, men of undoubted integrity and unqualified disinterestedness, and sent them to St. Domingo in order to ascertain the correct state of the case, and establish regulations accordingly, recommending strongly to them the humane plan of Las Casas, who insisted upon the complete emancipation of the Indians, and their admission to the same rights and privileges as the Spaniards. The philanthropist will applaud this disposition of Las Casas, who, in the warmth of his generous feelings, would listen to no argument as to their mental inferiority ; yet the superintendents, strongly inclined to follow the advice of the Cardinal to further the views of Las Casas, were compelled to admit, after the most satisfactory and the most impartial investigation, that the Indians were so inferior to the Spaniards, not merely in bodily strength, but also in mental capacity, as to be insusceptible of that state of civilization to which the latter had attained. The superintendents found that the Indians possessed an insurmountable aversion to any laborious effort, “ and that nothing but the authority of a master could compel them to work ; and, if they were not kept constantly under the eye and discipline of a superior, so great was their natural listlessness and indifference, that they would neither attend to religious instruction, nor observe those rites of Christianity which they had been already taught.”

Those amongst the early visitors of America who had opportunities of observing, and abilities sufficient to form a correct estimate of the Indians, (and, amongst

the rest, the bishop of Burgos and the council of the Indies) deemed their "faculties so limited, and their indolence so excessive, that every attempt to instruct or improve them would be fruitless."

At length Charles determined to inquire, personally, into the character of the native Americans, and thus to ascertain, if possible, the best method of treating them. An opportunity for making this inquiry soon occurred. "Quevedo, the bishop of Darien, who had accompanied Pedrarias to the continent in 1513, happened to land at Barcelona, where the court resided. It was quickly known that his sentiments concerning the talents and dispositions of the Indians differed from those of Las Casas; and Charles naturally concluded, that by confronting two respectable persons, who, during their residence in America, had full leisure to observe the manners of the people whom they pretended to describe, he might be able to discover which of them had formed his opinion with the greatest discernment and accuracy."

A day for this solemn audience was appointed. The Emperor appeared with extraordinary pomp, and took his seat on a throne in the great hall of his palace. Quevedo was called upon first to deliver his opinion. In a short discourse, he very feelingly lamented the fatal desolation of America, by the extinction of so many of its inhabitants; he acknowledged that this must be imputed, in some degree, to the excessive rigour and inconsiderate proceedings of the Spaniards; but declared, that all the people of the New World, whom he had seen either on the continent or in the islands, appeared to him to be "*a race of men marked out, by the inferiority of their talents, for servitude, and whom it would be impossible to instruct or improve, unless they were kept under the continual inspection of a master.*"

Las Casas asserted, that the faculties of the Americans were not naturally despicable, but unimproved; that "they were capable of receiving instruction in the principles of religion, as well as of acquiring the industry and arts which would qualify them for the various offices of social life." Yet, after the lapse of the long period of three hundred years, and the uniform contact of the white man, we find the Indian has not advanced one single degree in "the arts which would qualify him for the various offices of social life;" he is still the same, except where his race has been improved by the admixture of European blood, as I have elsewhere observed.

Figueró, in consequence of instructions which he received for the purpose, made an experiment concerning the capacity of the Indians, which was considered as decisive. He collected in St. Domingo a considerable number of the natives, and settled them in two villages, leaving them at perfect liberty, and with the uncontrolled direction of their own actions;—when they exercised so little industry in cultivating the ground, appeared so devoid of solicitude or foresight in providing for their own wants, and were such strangers to arrangement in conducting their affairs, that the Spaniards pronounced them incapable of being formed to live like men in social life, and considered them as children, who should be kept under the perpetual tutorage of persons superior to them in wisdom and sagacity.

It is deeply interesting to trace that physical and mental retrocession which, like the degrees on a well-regulated scale, marks the varieties of the human race, from the finely formed intellectual white man, to the aborigines of America, or the native of the Gold Coast. We shall find the dispositions and feelings descend in

like manner till a near approach to the brute creation becomes strikingly manifest. The desire of vengeance, which takes possession of the heart of savages, resembles the instinctive rage of an animal, rather than the passion of a man. It turns, with undiscerning fury, even against inanimate objects. If hurt accidentally by a stone, they often seize it in a transport of anger, and endeavour to wreak their vengeance upon it. If struck with an arrow in battle, they will tear it from the wound, break and bite it with their teeth, and dash it on the ground. With respect to their enemies, their vindictive rage acknowledges no bounds. The desire of revenge is the first and almost the only principle which a savage instils into the minds of his children. The force of this passion is so well understood by the natives of America, that the chiefs always appeal to it, in order to excite their people to take arms. If a chief of any tribe wishes to allure a band of warriors to follow him for the purpose of invading an enemy's country, the most persuasive topics of his martial eloquence are drawn from revenge. "The bones of our countrymen (says he) lie uncovered; their bloody bed has not been washed clean. Their spirits cry against us; they must be appeased. Let us go and devour the people by whom they were slain. Sit no longer inactive upon your mats; lift the hatchet, console the spirits of the dead, and tell them that they shall be avenged."

Resentment operates more powerfully among savages than considerations of policy. In former times the Americans unsparingly sacrificed their captives, which produced so great a decrease in their numbers, that many tribes endeavoured to remedy the evil by adopting prisoners taken in war; and such as they do naturalize, renounce for ever their native tribe, and assume the manners as well as passions of the people by whom

they are adopted so entirely, that they often join them in expeditions against their own countrymen.

The American is almost, if not altogether, insensible to the charms of beauty, and the power of love. He is unmoved by that passion which was designed to perpetuate life, to be the bond of social union, the source of tenderness and joy, and is the most ardent in the human breast: the rudest nations in every other part of the globe seem to feel its influence more powerfully than the aborigines of the New World.

Speaking of the savage tribes of America, Ulloa thus expresses himself:—"If one considers them as men, the narrowness of their understanding seems to be incompatible with the excellence of the soul. Their imbecility is so visible, that one can hardly form an idea of them different from what one has of the brutes. Their disposition is so singular, that there is no method of influencing them, no means of rousing them from that indifference which is proof against all the endeavours of the wisest persons—no expedient which can induce them to abandon that gross ignorance, or lay aside that careless negligence, which disconcert the prudence, and disappoint the care, of such as are attentive to their welfare." Condamine and Bouguer express a similar opinion.

M. de Chauvalon observes, "It is not the red colour of their complexion, it is not the singularity of their features, which constitutes the chief difference between them and us. It is their excessive simplicity; it is the limited degree of their faculties. Their reason is not more enlightened or more provident than the instinct of brutes. If we were to decide according to the first impression which the view of that people makes upon the mind, we should be disposed to believe that they do not belong to the same species with us."

Venegas says, " Their understanding comprehends little more than what they see, abstract ideas, and much less a chain of reasoning, being far beyond their power; so that they scarce ever improve their first ideas, and these are in general false, or at least inadequate. It is in vain to represent to them any future advantages which may result from doing or abstaining from this or that particular immediately present, the relation of means and ends being beyond the stretch of their faculties." Such is the opinion of men of discernment, possessing sound judgment, philosophic minds, and disposed to view the Indian in as favourable a light as possible; who, moreover, had ample opportunity for personal observation before any material or extensive physiological alteration had been effected by the contact of the white man. On the score of intellect, it would appear the native of America is inferior to the Negro.

Having already observed that the disposition and feelings of the savage approximate those of the brute, it may be further remarked, that courage and all the nobler virtues seem graduated upon a physiological scale in the varieties of the human species. Thus, as the Caucasian variety presents the finest forms, not only are their strength of body and powers of mind superior also, but their clemency, generosity, and courage pre-eminently conspicuous. Savages are naturally cowardly, thievish, revengeful, and cruel; and these qualities will be found to predominate precisely in proportion as the class is removed from the first variety of human nature. Savages devour each other; wild beasts do the same.

One very remarkable fact is strikingly illustrative of the natural difference between the white man and the inferior classes of his species—he was never known

to exist in a savage state. It is true, instances have occurred, where a white man has adopted the manners and company of the Indian; but, amidst all the discoveries of ancient or modern times, the circumstance of a tribe or people possessing the Caucasian form being found in a savage state has never occurred. There is nothing of the kind upon record.

That the Indian is much the same at the present time as he was found by Columbus and his associates, may be clearly perceived from the opinion of General Jackson (no mean authority) on the subject, which I will here introduce:—"The plan of removing the aboriginal people who yet remain within the settled portions of the United States, to the country west of the Mississippi river, approaches its consummation. It was adopted on the most mature consideration of the condition of this race, and ought to be persisted in till the object is accomplished, and prosecuted with as much vigour as a just regard to their circumstances will permit, and as fast as their consent can be obtained. All preceding experiments for the improvement of the Indians have failed. It seems now to be an established fact, that they cannot live in contact with a civilized community and prosper. Ages of fruitless endeavours have at length brought us to a knowledge of this principle of intercommunication with them. The past we cannot recall, but the future we can provide for. Independently of the treaty stipulations into which we have entered with the various tribes, for the usufructuary rights they have ceded to us, no one can doubt the moral duty of the government of the United States to protect, and, if possible, to preserve and perpetuate the scattered remnants of this race which are left within our borders. In the discharge of this duty, an extensive region in the west has been assigned for their perma-

ment residence. It has been divided into districts, and allotted amongst them. Many have already removed, and others are preparing to go; and with the exception of two small bands, living in Ohio and Indiana, not exceeding fifteen hundred persons, and of the Cherokees, all the tribes on the east side of the Mississippi, and extending from Lake Michigan to Florida, have entered into engagements which will lead to their transplantation. The plan for their removal and re-establishment is founded upon the knowledge we have gained of their character and habits, and has been dictated by a spirit of enlarged liberality. A territory exceeding in extent that relinquished has been granted to each tribe. Of its climate, fertility, and capacity to support an Indian population, the representations are highly favourable. To these districts the Indians are removed at the expense of the United States; and with certain supplies of clothing, arms, ammunition, and other indispensable articles, they are also furnished gratuitously with provisions for the period of a year after their arrival at their new homes. In that time, from the nature of the country, and of the product raised by them, they can subsist themselves by agricultural labour, if they choose to resort to that mode of life; if they do not, they are upon the skirts of the great prairies, where countless herds of buffalo roam, and a short time suffices to adapt their own habits to the changes which a change of the animals destined for their food must require. Ample arrangements have been set apart for the maintenance of schools; in some instances council-houses and churches are to be erected, dwellings constructed for the chiefs, and mills for common use. Funds have been set apart for the maintenance of the poor; the most necessary mechanical arts have been introduced, and blacksmiths, gunsmiths, wheelwrights, millwrights, &c., are supported

among them. Steel and iron, and sometimes salt, are purchased for them; and ploughs, and other farming utensils, domestic animals, looms, spinning-wheels, cards, &c., are presented to them. And besides these beneficial arrangements, annuities are, in all cases, paid, amounting in some instances to more than thirty dollars for each individual of the tribe, and in all cases sufficiently great, if justly divided and prudently expended, to enable them, in addition to their own exertions, to live comfortably. And as a stimulus for exertion, it is now provided by law, that, 'in all cases of the appointment of interpreters, or other persons employed for the benefit of the Indians, a preference shall be given to persons of Indian descent, if such can be found, who are properly qualified for the discharge of their duties.' Such are the arrangements for the physical comfort, and for the moral improvement, of the Indians. The necessary measures for their political advancement, and for their separation from our citizens, have not been neglected. The pledge of the United States has been given by Congress, that the country destined for the residence of this people shall be for ever 'secured and guaranteed to them.' A country, west of Missouri and Arkansas, has been assigned to them, into which the white settlements are not to be pushed. No political communities can be formed in that extensive region, except those which are established by the Indians themselves, or by the United States for them, and with their concurrence. A barrier has thus been raised for their protection against the encroachments of our citizens, and guarding the Indians, as far as possible, from those evils which have brought them to their present condition. Summary authority has been given, by law, to destroy all ardent spirits found in their country, without waiting the doubtful result

and slow progress of a legal seizure. I consider the absolute and unconditional interdiction of this article among these people as the first and great step in their amelioration. Half-way measures will answer no purpose. These cannot successfully contend against the cupidity of the seller and the overpowering appetite of the buyer; and the destructive effects of the traffic are marked in every page of the history of our Indian intercourse. Some general legislation seems necessary for the regulation of the relations which will exist in this new state of things between the government and people of the United States and these transplanted Indian tribes, and for the establishment among the latter, and with their own consent, of some principles of intercommunication, which their juxta-position will call for—that moral may be substituted for physical force; the authority of a few and simple laws for the tomahawk; and that an end may be put to those bloody wars whose prosecution seems to have made part of their social system. After the further details of this arrangement are completed, with a very general supervision over them, they ought to be left to the progress of events. These, I indulge the hope, will secure their prosperity and improvement, and a large portion of the moral debt we owe them will then be paid.”*

The lower varieties of the human race will be found cowardly and cruel. Having given elucidations of these qualities in the Negroes, something similar marks the character of the Indians. The latter never face their enemies after the European manner; on the contrary, their system of tactics is made up of ambuscade and surprise, and when what may be called a regular fight becomes unavoidable, the adverse parties fire and dis-

* Jackson's Message to Congress latter end of Year 1835.

charge their tomahawks at each other from behind trees. Destitute of intrepidity like the Negroes, like them also they evince a passive indifference to suffering and torture truly astonishing. As an exemplification of the Indian character, we quote the following from the interesting narrative of Peter Williamson, a native of the North of Scotland, who settled in America:—

Having married the daughter of an American planter, “My father-in-law (says he), in order to establish us in the world in an easy, if not an affluent, manner, made me a deed of gift of a tract of land that lay on the frontiers of Pennsylvania, near the forks of the Delaware, in Berks County, containing about two hundred acres, thirty of which were well cleared and fit for immediate use, whereon was a good house and barn. The place pleasing me well, I settled on it; and though it cost me the major part of my money in buying stock, household furniture, and implements for out-door work, and happy as I was in a good wife, yet did my felicity last me not long; for, in the year 1754, the Indians began to be troublesome on the frontiers of our province, where they appeared in small skulking parties, committing great devastations. Scarcely can I sustain the shock which for ever recoils on me at thinking on the fatal 2nd of October, 1754. My wife that day went from home to visit some of her relations; as I stayed up later than usual expecting her return, none being in the house besides myself, how great was my surprise and terror, when, about eleven o’clock at night, I heard the dismal war-cry or war-whoop of the savages, and, to my inexpressible dismay, soon found that my house was attacked by them. I flew to my chamber window, and perceived them to be twelve in number. They making several attempts to come in, I asked

them what they wanted. They gave no answer, but continued beating and trying to get the door open. Judge then the condition I must be in, knowing the merciless disposition of the savages, should I fall into their hands! To escape which dreadful misfortune, having my gun loaded in my hand, I threatened them with death if they did not desist. But how vain and fruitless are the efforts of one man against the united force of so many!—and of such blood-thirsty monsters as I had here to deal with. One of them that could speak a little English, threatened me in return, ‘that if I did not come out, they would burn me alive in the house;’ telling me further, what I unhappily perceived, that they were no friends to the English, but if I would come out and surrender myself prisoner, they would not kill me. My terror and distraction at hearing this is not to be expressed in words, nor easily imagined by any person unless in the same condition. Distracted as I was in such deplorable circumstances, I chose to rely on the uncertainty of their promises, rather than meet with certain death by rejecting them, and accordingly went out of the house with my gun in my hand, not knowing what I did, or that I had it. Immediately on my approach, they rushed on me like so many tigers, and instantly disarmed me. Having me thus in their power, the merciless villains bound me to a tree near the door: they then went into the house, and plundered and destroyed everything there was in it, carrying off what moveables they could; the rest, together with the house, which they set on fire, was consumed before my eyes!

“The savages, not satisfied with this, set fire to my barn, stable, and out-houses, wherein were about two hundred bushels of wheat, six cows, four horses, and five sheep, which underwent the same fate, being all en-

tirely consumed to ashes. During the conflagration, to describe the thoughts, the fears, and misery that I felt, is utterly impossible, as it is even now to mention what I feel at the recollection of the horrid circumstance.

“Having thus finished the execrable business about which they came, one of the monsters approached me with a tomahawk in his hand, threatening me with the worst of deaths if I would not willingly go with them, and be contented with their way of living. This I seemingly agreed to, promising to do everything for them that lay in my power; trusting to Providence for the time when I might be delivered out of their hands. Upon this they untied me, and gave me a great load to carry, under which I travelled all that night with them, full of the most terrible apprehensions, and oppressed with the greatest anxiety of mind, lest my unhappy wife should likewise have fallen a victim to these cruel monsters! At daybreak, my infernal masters ordered me to lay down my load, when tying my hands again round a tree with a small cord, they forced the blood out at my fingers’ ends. They then kindled a fire near the tree whereto I was bound, which filled me with the most dreadful agonies, concluding I was going to be made a sacrifice to their barbarity.

“The fire being made, they for some time danced round me after their manner, with various odd motions and antic gestures, whooping, hollowing, and crying in a frightful manner, as is their custom. Having satisfied themselves in this sort of their mirth, they proceeded in a more tragical manner—taking the burning sticks, flaming with fire at the ends, holding them to my face, head, hands, and feet, with monstrous pleasure and satisfaction, and at the same time threatened to burn me entirely if I made the least noise, or cried out. At length, they sat down round the fire, and

roasted the meat of which they had robbed my dwelling. When they had prepared it, and satisfied their voracious appetites, they offered some to me: though it may easily be imagined I had but little appetite to eat after the tortures and miseries I had undergone, yet I was forced to seem pleased with what they offered me, lest by refusing it they should be inclined to resume their hellish practices.

“When the sun was set, they put out the fire, and covered the ashes with leaves, according to their custom, that the white people might not discover any traces or signs of them.

“Proceeding from thence along by the Susquehanna for the space of six miles, loaded as I was before, we arrived at a spot near the Apalatin Mountains or Blue Hills, where they hid their plunder under logs of wood. From thence did these monsters proceed to a neighbouring house, occupied by one Jacob Snider and his family, consisting of his wife, five children, and a young man his servant. They soon got admittance into the unfortunate man’s house, where they immediately, without the least remorse, scalped both parents and children, plundered the house of everything that was moveable, and set fire to the same, where the poor creatures met their final doom amidst the flames.

“Thinking the young man belonging to this unfortunate family might be of use to them in carrying part of their plunder, they spared his life, and loaded him and myself with what they had here got, and again marched to the Blue Hills, where they secreted their booty as before. My fellow-sufferer could not long bear the cruel treatment which we were both obliged to suffer, and complaining bitterly to me of his being unable to proceed further, I endeavoured to console

him as much as lay in my power, as well as to encourage him to bear up under his afflictions, and wait with patience till we should be delivered out of their hands; but all in vain; he still continued his moans and tears, which one of the savages perceiving as we travelled along, instantly came up to us, and with his tomahawk gave him a blow on the head, which felled the unhappy youth to the ground, when they immediately scalped and left him.

“When provisions became scarce they made their way towards the Susquehanna, where, still to add to the barbarities they had committed, passing near another house, inhabited by an old man, whose name was John Adams, with his wife and four small children, and meeting with no resistance, they immediately scalped the unfortunate mother and her children before the unhappy old man’s eyes; when they proceeded in their hellish purpose of burning and destroying the house, barn, corn, hay, cattle, and everything the miserable man, a few hours before, was master of. Having saved what they thought proper from the flames, they gave the old man, feeble, weak, and in the miserable condition to which they had reduced him, as well as myself, burdens to carry; and loading themselves likewise with bread and meat, pursued their journey towards the Great Swamp, where being arrived, they lay for eight or nine days, sometimes diverting themselves in exercising the most barbarous cruelties on their unhappy victim, the old man. One night after he had been thus tormented, whilst he and I were sitting together, condoling each other, twenty-five other Indians arrived, bringing with them twenty scalps and three prisoners, who had unfortunately fallen into their hands in Cannocojigge, a small town near the river Susque-

hanna, chiefly inhabited by the Irish. These prisoners gave us some shocking accounts of the murders and devastations committed in their parts. This party, who now joined us, had it not, I found, in their power to commence their wickedness so soon as those who had visited my habitation, the first of their tragedies taking place on the 25th of October, 1754, when John Lewis, his wife, and three small children, fell sacrifices to their cruelty, and were miserably scalped and murdered; the house, barn, &c., consumed and destroyed. On the 28th, Jacob Miller, with his wife, and six of his family, together with everything on his plantation, experienced the same fate. The 30th, the house, mill, barn, twenty head of cattle, two teams of horses, and everything belonging to George Folke, met with similar treatment; himself, wife, and all his miserable family, consisting of nine persons, being inhumanly scalped, then cut to pieces and given to the swine.

“I shall give another instance of the frightful barbarities they related of these savages, and proceed to their own tragical fate. One of the substantial traders belonging to the province, having business that called him some miles up the country, fell into the hands of the demons, who not only scalped him, but immediately roasted him before he was dead, when they ate his whole body, and made what they called an Indian pudding of his head!

“The three persons that were brought with these additional forces constantly repining at their hard fate, and almost dead with the cruel treatment they had experienced, contrived at last to make their escape; but, being far from their own settlements, and not knowing the country, were soon after met by some others of the tribes, and brought back. The

poor creatures, almost famished for want of sustenance, having had none since the time of their capture, were no sooner in the clutches of the savages, than two of them were tied to a tree, and a great fire made round them, where they remained till they were terribly scorched and burned; when one of the fiends, with his scalping knife, ript open their bellies, took out their entrails, and threw them into the fire, whilst the others were employed in cutting, piercing, and tearing the flesh from their breasts, hands, arms, and legs, with red-hot irons. The third miserable victim was reserved a few hours longer, to be, if possible, sacrificed in a more cruel manner. His arms were tied close to his body, and a hole being dug deep enough for him to stand upright, he was put therein, and earth rammed and beat in all round his body up to his neck, so that his head only appeared above ground: they then scalped him, and there let him remain for three or four hours in the greatest agonies; after which, they made a small fire near his head, causing him to suffer the most excruciating torments imaginable, whilst the poor creature could only cry in mercy to kill him immediately: inexorable to his complaints, they continued the fire, and in this process of unparalleled tortures the miserable victim continued for nearly two hours, when death put a stop to his sufferings!"

CHAPTER III.

The Malays.—The Mongolians—Capacity—Phrenological Development.

THE Malay may be regarded as a step higher in the class of human nature, and in precise correspondence will his intellectual capacity, and the general qualities of his mind, be found: like the Negro and the Indian he is cowardly and ferocious, and like them he testifies indifference to torture and contempt of death at the stake.

As the Malays situated on the Malabar coast, as well as several other places, have long been in contact with Europeans, they, like the aborigines of America, have experienced improvement precisely in proportion to their connexion or commixture with the white man, a striking illustration of which is afforded in the following anecdote:—

“ Port Philip. Discovery of an Englishman, who has resided thirty-five years among the Savages at Port Philip.

“ Mr. Batman and others, referred to, had removed from Van Diemen's Land to Port Philip, on the coast of New South Wales, with the intention of establishing themselves there as settlers and large sheep farmers. Soon after their arrival they were struck by the stately gait of the natives; by the colour of many, and the European countenances of some individuals, and by the comparative civilization which prevailed. Rude embankments with tolerable stone facings were found in parts constructed across creeks and inlets,

with convenient sluices for the purpose of catching fish at the fall of the tide. Several of the bark shelters or wigwams were formed in a superior and comfortable manner, tolerably well thatched, with a narrow opening for the doorway, and fire-place in front. Pieces of wood were hollowed or scooped out to serve as calabashes or buckets to carry water, and the dresses of kangaroo skins were neatly joined together with regular stitches, and cut away so as to form a convenient vesture. The settlers had however not domiciled themselves in their new position many days, when these and various other indications of ingenuity were satisfactorily explained by the appearance of a white man, clothed in a kangaroo-skin cloak. He was at first rather timid in his approaches; but when spoken to kindly and offered a piece of bread, he threw off his reserve, and after eating the bread with apparent relish, and looking at it as if endeavouring to bring something to his recollection, he exclaimed, with symptoms of delight glowing in his face, ‘Bread!’ Other English words soon returned to his memory, and he was at last enabled to communicate, that his name was Buckley—that he had been one of those who escaped from the encampment of the prisoners by the ship *Ocean*, formed by the late Colonel Collins, in attempting, agreeably to the instructions of the British Government, to form a settlement at Port Philip in 1803—that he had lived ever since with the tribe of the aborigines whom he then met with in the bush, and over whom he had long exercised the rule of a chief. He is a very tall man, having served as a grenadier in Holland under the late Duke of York, is from fifty-eight to sixty years of age, and in excellent health. Through the assistance of the new settlers, he has forwarded a petition to the Lieu-

tenant-Governor, praying for a pardon, mainly with a view, we presume, to enable him to remain where he is, and to communicate the result of his intimacy with that interesting country, and the many valuable discoveries which he has made in it. This, we are glad to learn, his Excellency has been pleased to grant, impressing at the same time upon him the expectation that he will continue to do all in his power to maintain an amicable intercourse between the aborigines and the whites; for he had already been the means of preventing a sanguinary attack of his tribe, through misapprehension, on the little party already established there. In a philosophical point of view, this discovery is truly interesting, and a narrative of his various vicissitudes, during his long sojourn, well told, would rival the classic work of ‘Robinson Crusoe.’ Two other prisoners from the *Ocean* absconded with him, but he had never seen or heard of them since the end of the first twelvemonth, when he joined the Blacks.”

The genuine character of the Malay may be gathered from the following:—

“Advices from New Zealand, *via* Sydney, state the success of the expedition sent to the former place for the purpose of rescuing Mrs. Guard and two children from the hands of the savages, who detained them and nine seamen (after killing twelve) of the crew of the *Harriet*, of which Mrs. Guard’s husband was commander, and which was wrecked at a place called Metaroa. Upon information of the catastrophe, several applications were made to the Government on the subject, the result of which was, that it was resolved to send his Majesty’s ship *Alligator*, and the schooner *Isabella*, with a detachment of troops, to New Zealand, in order to see whether Mrs. Guard

and the seamen could be rescued. Captain Johnstone, of his Majesty's 50th regiment, volunteered to command the detachment; and accordingly that officer and Lieutenant Gunter embarked, with about seventy military, and the expedition sailed the latter end of August.

“ On the 22nd of September, 1834, the two vessels reached Metaroa, but not being able to land, they bore up for Nooma, a bay near Cape Egremont; but the weather continuing bad, they remained cruising about until the 28th of September, when they anchored at Metaroa, and after a little negotiation with the natives, the nine British seamen were given up for a chief who had been brought up to Sydney by the *Lucy Ann* as a hostage. In the mean time information was obtained that Mrs. Guard was at Nooma. The vessels accordingly sailed for that place; but on arriving there they were informed that one of the two children, a boy, had been carried about twenty miles eastward. However, Captain Johnstone and forty men went ashore. A chief came down and informed Captain Johnstone that he had charge of Mrs. Guard and one of the children, and he would give them up if a ransom was paid for them. Captain Johnstone ordered him to be secured, and sent on board the *Alligator*. On his way to the vessel, he jumped out of the boat, dived, and very nearly escaped, but being shot in the knee he was brought on board. As soon as the natives perceived their chief was captured, they retreated in confusion towards Haturawa, taking Mrs. Guard and the child with them. Accordingly the troops re-embarked, and the vessels sailed for the same place, but they waited about the coasts for several days before the natives appeared on the beach. At length they appeared, and made offers to

exchange Mrs. Guard and the female child for the chief who had been seized at Nooma. This was complied with, and Mrs. Guard and the girl were given up. They also promised to give up the boy, but did not do so; and on boats being sent on shore to know the reason, a party of the natives came down to the boat and said that he had been sent for, and was coming. This was believed, but the natives retreated a short distance and commenced firing on the party on shore. As soon as this was perceived by the vessels, they commenced a fire of grape-shot, which soon compelled the treacherous savages to retire and allow the party to embark on board the *Isabella*. It was determined to land the whole of the troops on the following day, but a gale coming on the landing could not be accomplished for several days, viz., on the 8th of October. This gave the New Zealanders time to collect their party, so that when the troops and sailors, to the number of one hundred, landed, they found the enemy much increased in numbers. The place where the party landed was overhung with cliffs, along which the natives were stationed, and the first difficulty was to gain the heights, which, however, was soon effected. On our troops gaining the top, most of the savages were in sight, and amongst them was one carrying the boy on his back. A long gun was also on the heights. As soon as our party was seen, some of the natives came and said the boy should be given up. At length the native with the boy came up, but insisted he should be ransomed, which being refused, he then tried to escape with the child on his back, who was tied on, but he was seized by a seaman named Williams, who stabbed him with his hanger, and another seaman coming up at the

time, shot him dead. A party of the natives, concealed in some flax, commenced firing immediately. These were soon compelled to abandon their position, and take shelter in one of their stockades. The long gun was then brought into use, and soon demolished the stockade, with several huts round it. The natives fled in all directions, leaving several dead bodies and a number of wounded. The object of the expedition being accomplished, the people re-embarked and sailed for Sydney."

"We have received accounts from Otago, in New Zealand, where the establishment of Mr. Weller is formed, which serve to show that the natives there are full as sanguinary as those of the other portion of the island, to which the accounts of yesterday referred. The following are extracts from the letters received:—

"I sincerely hope that your representations to the Governor, for a ship-of-war to look in occasionally here, will have the desired effect, for I do assure you I know not how long we have to live. Tarrabuco, Bloody Jack, Pocate, and an immense tribe of the natives from the surrounding settlements, have arrived here. They have been extremely daring and insolent, plundering several of our people of their clothes, victuals, &c., and, unless you can procure another vessel to come down in conjunction with the *Lucy Ann*, I fear we shall have much difficulty and loss in getting our produce and goods on board." We have all made up our minds to quit Otago for ever. It is unsafe to live in New Zealand, unless there is a force sufficient to protect ourselves down here. I do not imagine anything of consequence will be done to us before the arrival of the chiefs from Sydney, at least they

make no hesitation in telling us so, but if two vessels come down all will be right, as they will then stand in awe of us.

(Signed) “ ‘ J. B. WELLER.’ ”

“ The following is an extract from another letter:—

“ ‘ I am sorry to inform you that I have had my house burnt by the natives. They have been very troublesome, and Tarrabuco is here. Bloody Jack told Mr. Weller that he came here for the purpose of destroying all the white people, and of robbing them; and all the natives often say the same. Only yesterday Old Wrymouth threatened to burn my house because I did not give him pipes and tobacco for clearing the store, which Mr. Weller had agreed to pay. The natives are, however, more peaceable than they were, in consequence of hearing that a man-of-war had gone to the north, on account of what had taken place there with the *Harriet*, and they think she is coming here, which I hope is the truth.

(Signed) “ ‘ RICHARD HAYWARD.’ ”

“ Mrs. Guard states, that when the New Zealanders first took her prisoner she was nearly exhausted with the loss of blood, which was flowing from the wounds she received in her head from their tomahawks. They voraciously licked her blood, and, when it ceased to flow, attempted to make an incision in her throat for that purpose with part of an iron-hoop. They then stripped her and her children naked, dragged her to their huts, and would have killed her, had not a chief's wife kindly interfered in her behalf, and when the bludgeon was raised with that intention, threw a rug over her person, and saved her life. The savages took the two children from under her arms, and threw them on the ground; and while they were dividing the pro-

perty they had stolen from the crew of the *Harriet*, kept running backwards and forwards over the children as they lay on the ground—one of which, the youngest, still retains the marks of this brutal operation. They afterwards delivered the youngest child to the mother, and took the other away into the bush, and Mrs. Guard did not see it for two months after. A short time had elapsed, when the natives took Mrs. Guard to Wymattee, about forty miles from where the *Harriet* was wrecked, being in a perfect state of nudity, both her and her children, where they gave her an old shirt; this was the only covering she, and the infant sucking at her breast, had for the whole of the winter. They gave her potatoes to eat; and as she had made them great promises of what they would receive when Mr. Guard returned, if they spared her life, they did not afterwards ill use her. In this state she remained about five months, and during that time saw the natives cut up and eat those they killed belonging to the *Harriet* (one of whom was Mrs. Guard's brother), occasionally bringing some pieces of human flesh to her, and asking her to partake of it with them. When the vessels arrived off the Nooma, they brought her down, and expected the long-promised payment: Captain Guard immediately seized the man who had her, and secured him. The natives, on seeing this, fired several shots at Mrs. Guard; and the military, not having come up to Captain Guard's assistance in proper time to secure her, the New Zealanders ran away with Mrs. Guard into the bush, and took her back to Wymattee. Here they again wanted to kill her; but as numbers of them were against it, expecting she would fetch a large sum, she was allowed to live. The *Alligator* followed to Wymattee, and exchanged the native prisoner for Mrs. Guard and

her child; the other child was afterwards given up as well."

The Mongolian is superior to the three preceding varieties of the human race. Superior to them in animal conformation, as well as in intellectual capacity, he consequently approaches nearer to the white man; from whom, however, the very inferior distinctive organization of his body and mind place him at a very considerable distance. The empires of China and Japan evince that degree of superiority just mentioned, to which a variety of similar instances might be added. As conquerors, they have shone eminently conspicuous in the darker ages of the world; and, had Attila been as well furnished with poets and historians as Alexander, the name of the barbarous Hun might have been handed down to posterity, surrounded by as brilliant an halo as that which sheds such a dazzling lustre upon the memory of the polished Macedonian. Yet it must be admitted, that, although the Mongolians have been able to distinguish themselves as soldiers, and have succeeded in founding extensive and populous empires, they have never made much progress in the arts and sciences; while, if we investigate the subject, we shall find that their success in the field arose, not so much from their prowess, or even their overwhelming numbers, as from the effemination, the pusillanimity, and the general demoralization of their opponents. When Attila, with his innumerable host of barbarians, made inroads and spread devastation in the Eastern and Western Empire, that well-disciplined valiant race of Romans which had subdued the world no longer existed to oppose his progress. That wily politician, Augustus, attained the pinnacle of Roman greatness; he craftily usurped the supreme authority,

and thus loosening the corner-stone of that immense and magnificent fabric, which had been reared at the expense of rivers of the bravest blood, it gradually crumbled to ruins. Deceptive, cunning, and calculating, he was at the same time a voluptuous and disgusting sensualist; he hesitated at nothing for the gratification of his depraved appetite; and if the memory of the witty, the accomplished, the beautiful Julia has been rendered infamous by her undisguised immorality, by her libidinous debauchery, it cannot be denied that the influential example of her father was continually presented for her contemplation. In imitation of the monarch, the court of Augustus became licentious; the upper classes caught the infection, and in a comparatively short period, the demoralizing disease, like a loathsome epidemic, became general. Hence, the savage hordes of Scythia had to encounter, not the dauntless spirit which withstood the efforts of that accomplished captain, Pyrrhus, and at a later period baffled the justly-celebrated Carthaginian, but an undisciplined, degenerate, cowardly rabble. Yet, under such circumstances, so favourable to the success of an invader, the bloody desolating career of Attila was checked by the genius of a noble Roman, even at the period of his country's greatest debasement. Ætius, when Attila laid siege to Orleans, led the Romans and their allies against him, and defeated him in the plains of Chalons. "The conflict was fierce, various, obstinate, and bloody (says the historian), such as could not be paralleled either in the present or in past ages." The number of the slain, as stated by some accounts, amounted to three hundred thousand; by other writers it is represented at one hundred and sixty-two thousand.

Having already remarked that the lower the grade in

the scale of human nature, the more the propensities and disposition will be found to approximate the brute creation, savage ferocity being substituted for intellectual capacity. This principle is strikingly exemplified in Attila; he manifested no mental attainments, but was distinguished for cunning and sagacity, as well as for his cruel and sanguinary disposition. When he invaded Gaul, he involved in a promiscuous massacre the priests who served at the altar and the infants, who, in the hour of danger, had been providently baptized by the bishop, at the city of Metz, which, after glutting his savage revenge by the utter destruction of its inhabitants, he committed to the flames. He massacred hostages as well as captives: two hundred young maidens were tortured with exquisite and unrelenting rage; their bodies were torn asunder by wild horses, or their bones were crushed under the weight of rolling waggons, and their unburied limbs were abandoned on the public roads, as a prey to wolves and vultures. At the siege of Aquileia, we are told, the Huns mounted to the assault with irresistible fury; and the succeeding generation could scarcely discover the ruins of Aquileia! After this dreadful occurrence, Attila pursued his march; and as he passed, the cities of Altinum, Concordia, and Padua, were reduced to ashes. The following saying was worthy of the ferocious pride of Attila—that the grass never grew on the spot where his horse had trod.

The late Russian commander, Suwarrow, appears to have taken Attila for his prototype; nor is this surprising, since much of the Calmuc (Mongolian variety) blood circulates in the veins of many of the Muscovites. The countenance of Suwarrow had much of the Calmuc expression, and his actions

proved, that with the preponderance of baser blood, he had inherited the corresponding feelings and disposition; as a proof of which, may be instanced the storming of Ismael, as well indeed as the whole of his murderous proceedings; but, above all, the horrible massacre at Warsaw. After the defeat of the Poles, under the brave Kosciusko, on the 10th of October, 1794, Suwarrow appeared before Warsaw with an army of 60,000 men. He attempted to carry it by storm; it was gallantly defended; but, after a desperate resistance of eight hours, the Russians forced their way into the suburb of Praga, divided by the Vistula from the other part of Warsaw, when the Russian general compelled his soldiers to mount to the assault over the dead bodies of their comrades, and he ordered his savage hordes to massacre all they could find—to spare neither sex nor age! Thus perished 20,000 men, women, and children! A deputation waited on Suwarrow with the keys of the city, which were presented in the most humiliating manner; nor was anything left undone which it was thought could soften the heart of this blood-thirsty tiger. The Russians, however, entered the city with savage fury, and for hours occupied themselves in unresisting and indiscriminate slaughter! Infants were exhibited in demon-like triumph, writhing on Russian bayonets! Warsaw was given up to pillage, and for three days after their entrance, these barbarians were employed in searching the dead bodies that lay about the streets!

The Tartar expression was easily recognisable in the countenance of the late Emperor Alexander. There are many, no doubt, of the Caucasian variety in the extensive and thinly populated empire of the *soi disant* successors of the Cæsars; but, on the whole,

the Russians must be considered as a mongrel race, whose mental manifestations correspond with their inferiority of animal organization.

Hence it must be admitted, that, of the various grades of human nature, the most beautiful animal conformation produces the greatest mental capacity; and that nothing can be more ridiculous than to expect the Negro to equal the white man in scientific attainments. Education, properly directed, will not fail to have its influence on all the varieties of the human race; but, inasmuch as the Caucasian division is superior to every other, it has in all ages been pre-eminently distinguished accordingly. If, however, we are anxious to approach as nearly as possible to perfection, we shall find that it will become necessary to divide into sections the various classes or qualities of intellectual capacity. For instance, no person can become a poet unless he possess what phrenologists would denominate the requisite cerebral development, or a mathematician without the organs of calculation; consequently, in order to enable society at large to reap the greatest advantage from individual exertions, the labourers in science and art should be classified, and each pursue the branch for which, by organic development, he appears best calculated: thus would be obtained the influence of education in the superlative degree. What has enabled Birmingham to excel all the world in its manufactures but the division and subdivision of labour according to acknowledged individual capacity? A gun, for instance (and Birmingham is the great manufactory for this extraordinary engine), is divided amongst a number of workmen, namely, the lock filer, the borer, the stocker, &c., &c.

I am willing to admit, that an indifferent mechanical

capacity may be improved by perseverance under the influence of judicious instruction; but an individual thus circumstanced, that is, placed in a situation for the acquisition of mechanical knowledge, with little development of the requisite organs, will never excel as a workman; while, in the inverse ratio, the worst feelings of human nature may be diverted in some degree from their natural bent or inclination, by incessant impressive examples and inducements of an opposite character; and, as by practice muscular power is increased, the same rule will be found applicable to cerebral development.

Our clergymen afford an incontestable proof of the truth of phrenology, as well as of the doctrine here inculcated: it is the custom of our nobility and gentry to make a clergyman of one of their children, and in consequence the individual goes through the routine of scholarship as regularly perhaps as possible; yet, how very few of our ministers can lay claim to the title of *learned men*?

Whenever it so happens that the manufacture of an article can be placed in the hands of as many workmen as possible, or of which its ramifications or divisions are susceptible, and each person continually kept to his particular branch, the aggregate manufacture not only attains perfection, but it becomes cheaper to the public: and therefore, in order to render the greatest possible benefit to mankind from the arts and sciences, as well as from all kinds of manual operations, this principle should be kept steadily in view.

Further, as the Caucasian is physically and mentally superior to every other variety of the human race, the beings of which the class is composed are calculated to attain a degree of excellence in science, art, and

manual operations, of which the lower divisions are insusceptible. Education will improve the mind of the Negro or the Indian ; but it would be ridiculous to suppose that his mental or manual improvement could be rendered equal to the excellence of the white man. Every variety of human nature is susceptible of advance precisely in proportion to its capacity, and no more ; nor is it possible to produce that equality of the mind which many shallow unreflecting bigots unblushingly declare to be innate to all, and which (according to their doctrine), in the lowest division, only requires similar adscititious advantages to those enjoyed by the highest section, to attain a similar degree on the scale of improvement or excellence : nothing can be more absurd !

CHAPTER IV.

The Ouran-outang.—The Quadrumanous Tribe.

HAVING already remarked that the Negro constituted the descending link in the chain of nature which united human beings to the brute creation, I will point out the class of brutes which most nearly approximates the lowest variety of the genus *Homo*. No person can look at the ape species of the monkey tribe, without being surprised at its approach to the human figure, and particularly at its resemblance to the Negro. The ouran-outang must be regarded as the first variety of the species in question, and it unfortunately happens that such of these creatures as have been brought to this country, have been very young, and consequently small, and have seldom survived their captivity many years. Several have at various periods fallen under my observation, the tallest of which scarcely measured three feet in height; but we are informed that they have been seen more than six feet, a report to which I give full credit, since, in the month of June, 1835, I saw the skull of an ouran-outang at the Surrey Zoological Gardens (where it still remains) that fully bore out such a conclusion. At the same time, and at the same place, I saw a living ouran-outang, said to be four years of age (but I should think not so much), which, notwithstanding its diminutive size, manifested a wonderful similarity to the Negro.

The ouran-outang is found in some parts of the interior of Africa, and particularly in the island of

Borneo, forming two distinct varieties of the species. Andrew Battell, a Portuguese traveller, who resided in Angola nearly eighteen years, informs us, that these animals were not uncommon in the woods of that country, where they attained a gigantic stature. They were thinly covered with dun-coloured hair, their legs were destitute of calves, and they might sometimes be seen walking in an erect position. The inhabitants of the country, when they travel through the woods, make fires around the place where they sleep, to keep at a distance the various kinds of ferocious animals: to these fires the ouran-outangs would resort in the mornings, sitting by them till the last of the embers were expired; but they had not sense enough to add more fuel. Being quadrumanous, they may be said to live principally in the trees, although Jobson asserts that their habitations were found in some of the woods, composed of plants and the branches of trees so thickly interwoven as to protect them from the heat of the sun.

Ouran-outangs are not lively and frolicsome, like the monkey tribe in general, but appear deliberate and sedate. With a piece of wood or a staff in their hands they are enabled to drive off the elephant. They have been known to throw stones at those who have offended them. Bosman informs us, that behind the English fort at Wimba, on the coast of Guinea, several of these creatures fell upon two of the Company's slaves, overpowered them, and were about to poke out their eyes with sticks, when a party of Negroes happened to come up at a fortunate moment to their rescue. It is said they sometimes steal the Negresses, and carry them off into the woods.

Dr. Tyson, who gave a very exact description of a young ouran-outang, which was exhibited about a

century ago in London, states, that in many of its actions it evinced an extraordinary degree of sagacity, and in its disposition was exceedingly mild. Those that he knew on board the vessel that brought him over, he would embrace with the greatest tenderness; and, although there were monkeys on board, it was observed that he never would associate with any of them. He used sometimes to wear clothes, and at length became very fond of them. He often would put part of them on without help, and carry the remainder in his hands to one of the ship's company for his assistance. He would lie in bed, place his head on a pillow, and pull up the bedclothes to keep himself warm, exactly like a man. I have witnessed similar specimens of sagacity repeatedly exhibited by ouran-outangs which have been brought over to this country.

Vasmaer's account of an ouran-outang, presented to the Prince of Orange in the year 1776, is highly interesting. This animal, he says, was a female, and its height about two Rhenish feet and a half. It showed no symptoms of fierceness or malignity, and was even of a somewhat melancholy appearance. It was fond of being in company, and showed a preference to those who daily attended to its wants, of which it appeared to be very sensible. Often when they retired, it would throw itself on the ground as if in despair, uttering lamentable cries, and tearing in pieces the linen within its reach. Its keeper having been accustomed to sit near it on the ground, it frequently took the hay off its bed, and placed it by its side, and seemed by every demonstration to invite him to be seated near it. Its usual manner of walking was on all-fours, like other apes, but it could also walk erect. One morning it got unchained, and ascended the beam and rafters of the building with

wonderful agility; nor was it retaken without some trouble. During its state of liberty, it had, amongst other things, taken the cork from a bottle of Malaga wine, which it drank to the last drop, and set the bottle in its place again. It ate almost everything that was given to it; but its chief food was bread, roots, and especially carrots; all sorts of fruits, especially strawberries; and it appeared extremely fond of aromatic plants, and of the leaves and root of parsley. It also ate meat, both boiled and roasted, as well as fish. It was not observed to hunt for insects like monkeys; was fond of eggs, which it broke with its teeth, and sucked completely; but fish and roasted meat seemed its favourite food. It had been taught to eat with a spoon and a fork. When presented with strawberries on a plate, it was extremely amusing to see the animal take them up, one by one, with a fork, and put them into its mouth, holding at the same time the plate in the other hand. Its common drink was water, but it also very willingly drank all sorts of wine, and particularly Malaga. After drinking, it wiped its lips; and after eating, if presented with a toothpick, would use it in a proper manner. While on shipboard, it ran freely about the vessel, played with the sailors, and would go, like them, into the kitchen for its mess. At the approach of night, it lay down to sleep, first preparing its bed, by shaking well the hay on which it slept, and putting it in proper order; and, lastly, covering itself warm with the coverlet. One day, seeing the padlock of its chain opened with a key, and shut again, it seized a little bit of stick and put it into the keyhole, turning it about in all directions, endeavouring to see whether the padlock would open or not. This animal lived seven months in Holland. On its first arrival, it had

but very little hair, except on its back and arms; but on the approach of winter, it became extremely well covered, the hair on the back being three inches in length. The whole animal then appeared of a chestnut colour. It came from the island of Borneo.

The Comte de Buffon mentions an ouran-outang that generally walked on two feet, even when carrying things of considerable weight. His air was melancholy, his gait grave, his movements measured, his disposition gentle, and very far from that of the monkey tribe in general. He would present his hand to conduct the people who came to visit him, and walk as gravely along with them as if he had formed a part of the company. He frequently used to sit with persons at dinner, when he would unfold his napkin, wipe his lips, use a spoon or a fork to carry his victuals to his mouth, pour his liquor into a glass, and make the latter touch that of the person who drank along with him. If he was invited to take tea, he brought a cup and saucer, placed them on the table, put in sugar, poured out the tea, and allowed it to cool before he drank it. All these actions he performed without any other instigation than the signs or verbal orders of his master, and often even of his own accord.

Hamilton says, that he saw an ouran-outang at Java, whose air was grave and melancholy; that it would light a fire, and blow it with its mouth; and that it would broil a fish to eat with its boiled rice after the manner of the human race.

One of these animals that Le Comte saw in the Straits of Molucca is described as having manners similar to those already mentioned. It walked upright, and used its hands and arms like a man; and indeed its actions were in general so nearly allied to

those of mankind, and its passions so expressive, that a dumb person could scarcely render himself better understood. Its joy or anger it signified by stamping with its foot on the ground. It had been taught to dance, and would at times cry like a child. While on board the vessel, it frequently ran up the rigging, and played as many antics aloft to divert the company as a rope-dancer. It could leap, with surprising agility and security, from one rope to another, though fifteen or twenty feet asunder.

Pyrard asserts that these animals are found in Sierra Leone, where they are strong and well-formed, and so industrious, that when properly trained and fed they work like servants; that when ordered they will pound any substances in a mortar; and that they are frequently sent to fetch water from the rivers in small pitchers, which they carry full on their heads; but when they arrive at the door of the dwelling, if these are not soon taken off, they suffer them to fall, and when they perceive the pitcher overturned and broken, they utter loud lamentations. Barbot also says, that they are frequently rendered of service in the settlements on the coast of Guinea, by being taught to turn the spit, and watch the roasting of meat, which they perform with considerable dexterity and address.

M. de la Brosse purchased two ouran-outangs from a Negro, and he states that they would sit at table like men, and eat there every kind of food without distinction. They would use a knife, fork, or spoon, to cut or lay hold of what was put on their plate. They drank wine and other liquors. At table, when they wanted anything, they easily made themselves understood to the cabin-boy; and when the boy refused to answer their demands, they frequently be-

came enraged, seized him by the arm, bit, and threw him down. The male was seized with sickness, and he made the people attend him as if he had been a human being. He was even twice bled in the right arm, and whenever afterwards he found himself in the same condition, he held out his arm to be bled, as if he knew that he had formerly derived benefit from that operation.

Pere Carbason brought up an ouran-outang, which became so attached to him, that wherever he went it always appeared desirous of accompanying him : whenever, therefore, he had to perform the service of the church, he was always under the necessity of shutting it up in a room. Once, however, the animal escaped, and followed the father to the church, where silently mounting on the sounding-board above the pulpit, he lay perfectly still till the service commenced. He then crept to the edge, and overlooking the preacher, imitated all his gestures in so grotesque a manner, that the whole congregation were unavoidably urged to laugh. The father, surprised and confounded at this ill-timed levity, severely reproved his audience for their inattention. The reproof failed in its effect, the congregation still laughed, and the preacher, in the warmth of his zeal, redoubled his vociferation and his actions : these the ouran-outang imitated so exactly, that the congregation could no longer restrain themselves, but burst out into a loud and continued laughter. A friend pointed out the cause of this improper conduct ; and such was the arch demeanour of the animal, that it was with the utmost difficulty the father could command the muscles of his countenance, and keep himself apparently serious, while he ordered the servants of the church to take him away.

From what has been stated, it will be perceived that, on the score of sagacity, and the power of imitating the ways and actions of human beings, the ouran-outang is justly entitled to rank next to the Negro in the wonderfully graduated scale of animated nature: its form, particularly its head, is strikingly analogous; and thus, as it comes the nearest to man in its physiological conformation, it approximates him more nearly than any other creature in its manners and habits. However, independently of its want of speech, there are other obvious distinctions, which have been pointed out by Blumenbach, Cuvier, and others, which sufficiently mark its place in the circle of creation. Lawrence, speaking on this subject, thus expresses himself:—"All the simiæ are *quadrumanous*; that is, they possess opposable members, or thumbs, on the hind as well as on the fore limbs: they have perfect clavicles, perfect pronation and supination of the fore arm; long and flexible fingers and toes: hence they have the power of imitating many human actions—hence, too, they are excellent climbers. On the other hand, they cannot easily stand or walk upright, because the foot rests on its outer edge, the heel does not touch the ground, and the narrowness of the pelvis renders the trunk unsteady; consequently they are neither biped, nor strictly quadruped. They resemble man in the general conformation of the cranium, and in the configuration of the brain; of which, however, the cerebral hemispheres are greatly reduced. The face is turned forwards; the optic axes are parallel, the orbits complete, and separate from the temporal fossæ;

the nose is flat (hence the name *simia* from *simus*, flat-nosed), and has a singular triangular *os nasi*.

“ In this *quadrumanous* order, there is a constantly increasing deviation from the human structure, by increased elongation of the muzzle, and advances to the quadruped attitude and progression. In the ouran-outang, the front of the head has a very human character, the forehead being large and high, and the facial angle consequently considerable; indeed, no animal approaches to man so nearly as this, in the form of the head, and the volume of the brain.”

It may be justly remarked, that ouran-outangs are not calculated to walk erect, or go on all-fours; they are intended to live chiefly in trees, for which they are admirably adapted by having prehensile members, instruments for grasping and holding, on both upper and lower extremities. They live in trees, and find their food in them; they can hang by one fore or hind leg, employing the remaining members in gathering fruit, or other offices. The female is retromingent.

Next to man, the ouran-outang possesses the largest volume of brain, by comparison, of any living creature, particularly in regard to those medullary lobes, which phrenologists very correctly term the intellectual organs, which are placed in the forehead; and those who have seen an ouran-outang could not fail to have remarked the great similarity of the forehead of this creature to that of man. Hence its powers of perception, and its reflective faculties, are superior to those of every other class of brutes, and consequently its suscep-

tibility of education equally distinguishable also. Similar remarks are applicable to the ape species generally; but as no other variety is equal in form, and particularly in the shape and size of the forehead, to the ouran-outang, it would be in vain to look for similar mental manifestations, or that susceptibility of education which distinguishes the latter.

Descending the chain of animated nature, we arrive next at the baboon class. The common baboon is found in the hottest parts of Africa, and also in the island of Borneo, as well as upon the Asiatic continent. One of the varieties of this species grows to a large size. I saw one of these animals a few years ago at Liverpool, that had lately arrived from Africa, which, when standing erect, measured five feet seven inches in height; it was excessively strong and muscular, particularly in its upper parts; and though it had been taught some tricks, such as sitting in a chair, smoking a pipe, &c., yet it appeared extremely savage, and on the appearance of a female, it shook the bars of its cage with ungovernable and ferocious excitement. To the male spectators, he uniformly presented an ill-natured and threatening aspect, jerking his head upwards, and threatening every one that came within his reach. I never recollect an animal whose aspect was more disgusting. Its forehead was not distinguished by that frontal elevation for which the ouran-outang is so remarkable, while the lower part of its countenance was much more elongated, with enormous lateral elevations, ribbed, and of a blue

colour, which gave it not merely a grotesque, but a hideous, appearance. The formation of the head of this creature differed very much from that of the ouran-outang in its posterior conformation, or that part (behind and above the ears) to which phrenologists assign the organs of combativeness and destructiveness: these parts presented a degree of elevation something similar to what is observable in the bull-dog; and it must be confessed, that its mental manifestations were precisely in consonance with the cerebral development of this part of the animal's cranium. This baboon was further distinguishable from the ouran-outang, and from the ape species in general, by a short tail, which is common to its class.

We are told, that in Siam baboons frequently sally forth in astonishing numbers to attack the villages during the time the labourers are occupied in the rice harvest, and plunder the habitations of whatever provisions they can find. Fruit, corn, and roots, form their principal food, in obtaining which they sometimes commit incredible mischief. In a state of captivity, they will eat meat and eggs, and are very fond of wine and spirits.

Baboons appear in great numbers in the neighbourhood of the Cape of Good Hope: they associate in troops, but seldom descend from their heights, except for the purpose of plundering the gardens which lie near the foot of the mountains; and while they are engaged in these depredations, they very sagaciously place sentinels for the purpose of preventing surprise. If the sentinel per-

ceives the approach of a human being, he gives the signal (a loud yell), when the whole troop retreat with the utmost expedition, the young jumping on and clinging to the backs of their mothers.

It seems these baboons may be rendered docile, but always retain the disposition to revenge an injury. Kolben tells us, that at the Cape of Good Hope, they are often taken young, and brought up with milk, &c., and that they will become as watchful as possible over their master's property. They attain the height of five feet, and are able, in spite of resistance, to drag the strongest man along with them.

I give the following anecdote from memory; I have read it in some publication, I believe in 'Shipp's Memoirs.'—The barracks at the Cape of Good Hope were situated at the foot of a mountain, which formed the residence of a troop of large baboons; and the latter, if any attempt were made to approach their elevated habitation, would throw down stones at the intruder, as well as roll larger ones down the sides of the mountain. These creatures displayed uncommon dexterity and cunning in their marauding expeditions; but it so happened that a soldier, in the dusk of the evening, met one of these animals coming out of the barracks, and immediately seized it, and some of his comrades coming to his assistance the thief was secured. These baboons had grey beards, which gave them not only a grotesque, but also a venerable appearance; the soldiers, therefore, by way of frolic,

shaved the captive, and the next morning gave him his liberty ; but his old associates would no longer acknowledge his acquaintance. As the disfigured baboon proceeded to ascend the mountain to his long accustomed haunts, he was met by the troop, who opposed his progress, and constrained him to quit the society altogether. The forlorn creature re-entered the barracks of his own accord, and became an inmate.

Inferior to the ouran-outang in the form of the head, its intellectual capacity is found in precise correspondence ; and although it may be taught much that shows a great degree of perception and power of reflection, yet it is incapable of those acquirements which the ouran-outang attains with facility and ease.

It is not necessary for the object I have in view to trace the gradations of intellect, and consequent capacity for education, throughout the almost endless varieties of the monkey tribe ; having described the capacities of the two first species, I must further observe, that as a genus they approach the nearest to man in the powers of the mind, and that we should find, if we traced every ramification, the intellectual manifestation exactly in accordance with the frontal cerebral development. The dispositions and feelings of animals will be found to correspond with the form and size of the brain, as a necessary consequence.

CHAPTER V.

The Elephant.—The Quadrupedal Tribe.

FROM the *quadrumanous* tribe we descend to *quadrupeds*, at the head of which in bulk, if not in beauty, must be placed the elephant; beyond all question, the most intellectual of all four-footed animals. Can any physiognomist, or even an ordinary observer, look at the countenance of this huge creature, and not be convinced that the superiority of its understanding is impressively indicated by its very intelligent eye? Let us just glance at the form of the elephant's head, the frontal or forehead; can we find another specimen of the quadrupedal genus with so obvious, and indeed so great a development of intellectual capacity, of the organs of causality and comparison, and also those of imitation, as this animal? How far his mental manifestations (to use the language of phrenology) may correspond with his cerebral development, may be gathered from the following anecdotes:—

The author of 'Lacon,' already noticed in the commencement of this work, asserted, that phrenology was too contemptible for consideration, and that "no sound philosopher will confound *instinct* with *reason*;" meaning, in the first case, that phrenology was altogether delusive, and that human nature only possessed reason; yet, in defiance of his inveterate prejudice, he controverts his own position in

the following anecdote, which appears as a note to the one hundred and sixty-fifth article of his second volume. I will quote his words:—"There are some facts recorded of the elephant, that one scarcely knows how to reconcile to mere instinct, if the facts be authentic. I have heard the late Sir George Staunton say, that when General Meadows reviewed four war-elephants that had been sent from Ceylon to Madras, to assist in getting the British artillery through the *Gauts*, a very extraordinary circumstance took place. The war-elephant, it is well known, is trained to perform the grand salam, which is done by falling on the first joint of the fore leg, at a certain signal. The largest of the four elephants was particularly noticed by the General as being terribly out of condition: the keeper was ordered up to explain the cause, and was in the act of doing this to the General, when the elephant advanced a few steps out of the line, and with one stroke of his proboscis laid his keeper dead at his feet. He then retired back again into his position, and performed the grand *salam*. This circumstance excited some considerable alarm; when the wife of the keeper ran up to his dead body, and, in a broken sort of exclamation, cried out that she was always afraid something of this sort would happen, as he was constantly in the habit of robbing that elephant of his rations of rice, by taking them away from his crib after they had been served out to him under the inspection of his superior. This anecdote is rather a staggering one; but I have mentioned it to many persons who have been in India, and most of them were no strangers to the circumstance."

Elephants not only obey the voice of their keeper in his presence, but some, even in his absence, will perform tasks which have been explained to them. "I have seen two (says M. D'Osbonville) occupied in beating down a wall, which their keeper had desired them to do, and encouraged them by a promise of fruit and brandy. They combined their efforts, and, doubling up their trunks, which were guarded from injury by leather, thrust against the strongest part of the wall, and by reiterated shocks continued their efforts, carefully observing and following with their eyes the effects of the equilibrium: at last, when it was sufficiently loosened, making one violent push, they suddenly drew back together, that they might not be wounded, and the whole came tumbling to the ground."

When it becomes requisite for the elephant to perform any painful labour, his keeper explains the nature of the operations, and recites the reasons which ought to induce him to obey. If the animal shows repugnance to what is required of him, his keeper promises to give him arrack, or somewhat else of which he knows the elephant to be fond. It is dangerous, however, to break any promise which has been made to him, many keepers having fallen victims to indiscretions of this kind.

However, though the elephant is vindictive, he is not ungrateful, as the following anecdote will testify:—A soldier at Pondicherry was accustomed to give a certain quantity of arrack to an elephant every time he received his pay; and having one day become intoxicated, and being pursued by the guard, he took refuge under the elephant, and there fell fast

asleep. The guard in vain attempted to drag him from this asylum, as the animal defended him with its trunk. On awakening, however, the soldier became dreadfully alarmed at finding himself under such an enormous creature. The elephant, perceiving his fears, immediately caressed him with his trunk.

The following instance of the sagacity of the elephant is related by Dr. Darwin, who had it from some gentlemen of undoubted veracity who had resided in our East Indian settlements. The elephants that are used to carry the baggage of our armies, are each put under the care of a native of Hindostan; and while this person and his wife go into the woods to collect leaves and branches for the animal's food, they fix him to the ground by a length of chain, and frequently leave a child, yet unable to walk, under his protection, which the intelligent animal not only defends, but as it creeps about, when it arrives near the extremity of his chain, he wraps his trunk gently round its body, and brings it again into the centre of the circle.

“And now for an instance of self-denial which I have often witnessed on the part of my friend, the large elephant. I have observed him very busy, flapping right and flapping left, evidently much annoyed by the persecution of the mosquitoes! By-the-by, no one can have an idea how hard the tiger-mosquito can bite. I will, however, give an instance of it, for the truth of which I cannot positively vouch; but I remember that once, when it rained in torrents, and we were on a boating expedition, a marine, who, to keep his charge dry, had his fore-finger inserted

in the barrel of his musket, pulled it out in a great hurry, exclaiming to his comrade, "May I be shot, Bill, if one of them beggars ha'nt bit me right through the barrel of my musket!" This *par parenthèse*, and now to proceed:—As I said before, the elephant showed, by constant flagellation of his person, that he was much annoyed by his persecutors; and just at that time, the keeper brought a little naked black thing, as round as a ball, which in India they call a child, laid it down before the animal, with two words in Hindostanee—'Watch it,' and then walked away into the town. The elephant immediately broke off the larger part of the bough, so as to make a smaller and more convenient whisk, and directed his whole attention to the child, gently fanning the little lump of Indian ink, and driving away every mosquito which came near it; this he continued for upwards of two hours, regardless of himself, until the keeper returned. It was really a beautiful sight, and causing much reflection. Here was a monster, whose bulk exceeded that of the infant by at least ten thousand times, acknowledging that the image of his Maker, even in its lowest degree of perfection, was divine—silently proving the truth of the sacred announcement, that God had 'given to man dominion over the beast of the field.' And here, too, was a brute animal setting an example of devotion and self-denial which but few Christians, none indeed but a mother, could have practised. As I am on the subject, I may as well inform my readers how and in which way this elephant and I parted company, for it was equally characteristic of the animal. The army was ordered to march, and the elephants were called into

requisition to carry the tents. The Quarter-Master-General, the man with four eyes as the natives called him, because he wore spectacles, superintended the loading of the animals—tent upon tent was heaped on my friend, who said nothing, until at last he found they were overdoing the thing, and then he roared out his complaints, which the keeper explained; but there was still one more tent to be carried, and, therefore, as one more or less could make no difference, it was ordered to be put upon his back. The elephant said no more, but he turned sulky—enough was as good as a feast with him, and he considered this treatment as no joke. Now it so happened, that, at the time the main street, and the only street of the town, which was at least half a mile long, was crowded to suffocation with tattoos, or little ponies, and small oxen, every one of them loaded with a couple of cases of claret, or brandy, or something else, slung on each side of them, attended by cooleys, who with their hooting, and pushing, and beating, and screaming, created a very lively and bustling scene. When the last tent was put on the elephant he was like a mountain, with canvass on each side of him bulging out to a width equal to his own; there was just room for him to pass through the two rows of houses on each side of the street, and not ten inches to spare. He was ordered by the keeper to go on—he obeyed the order certainly, but in what way?—he threw his trunk up in the air, screamed a loud shriek of indignation, and set off at a trot, which was about equal in speed to a horse's gallop, right down the street, mowing down before him every pony, bullock, and cooley that barred his passage. The confusion was

indescribable; all the little animals were with their legs in the air, claret and brandy poured in rivulets down the street, cooleys screamed as they threw themselves into the doors and windows, and at one fell swoop the angry gentleman demolished the major part of the comforts of the officers, who were little aware how much they were to sacrifice for the sake of an extra tent. With my eyes I followed my friend in his reckless career, until he was enveloped and hid from my view in a cloud of dust, and that was my farewell of him. I turned round, and observed close to me the Quarter-Master-General, looking with all his *four eyes* at the effects of his inhumanity."

A young elephant received a severe wound in its head, the pain of which rendered the animal so ungovernable, that whenever any person approached, it ran off with fury, and would suffer no person to come within several yards of it. The keeper at length contrived to make the mother of the animal understand that he was anxious to have the wound dressed, when she immediately seized her young one with her trunk, and held it firmly, though groaning with agony, while the wound was completely dressed; and she continued to perform this service till the animal recovered.

"I have frequently remarked (says Terry, in his 'Voyage to the East Indies') that the elephant performs many actions which would seem almost the immediate effects of reason. He does anything his master commands. If he be directed to terrify any person, he runs upon him with every appearance of fury, and, when he comes near, stops short, without

doing him the least injury. When the master chooses to affront any person, he makes the elephant acquainted with his wishes, when the animal collects muddy water with his trunk, and squirts it upon the object pointed out to him."

Madame de Jeck, the celebrated performer, could never be induced to go upon any strange stage without being allowed to examine it, which she would do most cautiously and in detail, evidently with a view of ascertaining whether it was sufficiently strong to bear her weight; but she did not confine her investigation merely to the stage, she examined the scenes, the grooves, and every part.

Ducrow, with a very few lessons, taught an elephant belonging to Wombwell to perform several tricks on the stage. In the course of his performance, the elephant had to cross a platform, which, one evening, gave way in a trifling degree beneath his weight. On approaching it the following night, the animal would not mount it, till by a strict examination he was satisfied that he might trust himself upon it with safety. Upon one occasion, I stumbled and fell against this elephant in the dark, when I perceived his trunk instantly round me; with no evil design, however, for the good-natured animal no sooner perceived I was unhurt, than he began to fumble for my waistcoat pockets, out of which I had been in the habit of allowing him to take gingerbread.

Will any person be hardy enough to deny, after perusing the preceding well-authenticated anecdotes (to which hundreds more might be added), the possession of *reasoning powers* by the elephant?

To assert that the form of the elephant resembles

that of the human species, would appear, at the first blush of the case, an outrageous comparison; yet, on due consideration, an extraordinary correspondence, if not a striking similitude, will become manifest. That joint which unites the thigh and the hind leg, and which in the horse is known by the name of the hock, bends inwards, like the knee of a human being, and which, strictly speaking, constitutes the knee of the elephant, corresponding as it does with the same part in man—a formation the reverse of every other quadruped. Then again, the teats of the female are situated more forward (much nearer the fore legs) than those of any other class of the brute creation, the monkey tribe alone excepted. Further, the forehead is equally remarkable for its superior elevation; while that wonderful provision of nature, the proboscis or trunk, by its length, its flexibility, and its finger-like extremity, becomes an admirable substitute for a hand, with which, I make no doubt most of my readers are well aware, the interesting beast in question can pick up a sixpence, or even a pin, from the ground. Hence it would clearly appear, that as in the human race the most perfect physical forms produce the highest intellectual capacities, so, as we descend the chain of animated existence, we shall find, the nearer the creature approximates the conformation and physiology of the former, the greater sagacity it will be found to possess. Monkeys suckle their young from the breast; something very similar constitutes a part or portion of the animal economy of the elephant. Having noticed the peculiar structure of the hock or knee of this curious animal, if we consider the formation of

the fore leg, we shall perceive it differs from that of all other quadrupeds; it contains a joint less than that of the horse, and seems altogether a sort of awkward approximation towards the arm of man, the upper joint supplying the place of the elbow, the lower that of the wrist.

The rhinoceros, in bulk nearly equal to the elephant, and, like the latter, existing beneath the burning climates of the tropics, whose habits and manner of feeding are much the same, offers, nevertheless, a striking contrast on the score of intellectual capacity. The head of this animal, unlike that of the elephant, is depressed, much depressed; and therefore, as there is very trifling, if any, frontal cerebral development, little sagacity can be expected, nor has it ever been known to manifest any symptoms which could possibly imply the power of deduction. There happens, at this moment, to be one of these creatures at the Zoological Gardens, in the Regent's Park, which appears to be full grown; and within a few yards of his stable, will be found a fine specimen of the Asiatic elephant. Let any person, who feels sufficiently interested in the subject, visit the Gardens just mentioned; and, after examining the different structures of the heads of these two animals, let him observe the expression of their countenances, and I think he will agree with me, that the elephant is as much superior to his bulky neighbour in the evidences or indications of intelligence, as his frontal or forehead presents a greater elevation.

On the score of sagacity, the dog is entitled to rank next the elephant. The dog in a state of nature presents no more varieties, in all probability,

than result from the effect of climate; but having been the companion of man from time immemorial, having experienced a degree of familiar domestication far beyond that of any other quadruped, he has undergone changes in his form, his colour, and his character; and, from this circumstance, and a sort of indiscriminate communication or commixture, has branched out into interminable ramifications. However, notwithstanding the indefinite branches to which I have just alluded, inasmuch as the services of this animal were of the first importance to the sportsman, the shepherd, and others, distinct classifications have been carefully maintained, to which I shall chiefly confine my observations.

Inferior to the elephant in the frontal projection of the head, and consequently in its results or manifestations, the dog is, nevertheless, superior to the horse or the cow in these respects, as must be evident to any person capable of reflection, who will notice the one and observe the other. It is generally supposed that what is called the Newfoundland dog and the poodle are, on the score of sagacity, superior to all the other varieties of the tribe; but this is not the case, as, on investigation, it will be perceived, that this quality, *sagacity*, or a lower order of reason, exists in proportion to the elevation and breadth of the frontal, or anterior region of the brain; as a proof of which, the modern greyhound may be instanced: his head is narrow and depressed in a greater degree than any other acknowledged variety of the tribe, and his manifestations of sagacity amount to nothing; or, at least, they are of the

lowest order, as the formation of his cranium incontrovertably indicates.

The talbot or old English bloodhound, the southern hound, the terrier, the well-bred pointer, the setter, and spaniel, on the score of sagacity, are superior to all their canine competitors. I have bred and kept many dogs; and, amongst the rest, I once possessed a very large and a very handsome setter, who would allow no beggar or suspicious person to approach my door: he would give them an expressive hint of their intrusion by taking hold of the lappet of their coat, when, if they retreated, he loosened his hold; but when a contrary disposition was evinced, the dog would oppose the intruder fiercely, and to the utmost of his power. A daughter of this animal manifested superior sagacity to her sire. She testified a similar dislike to beggars and suspicious characters; but this was not all. In the small town (in Lancashire) where I resided, my yard happened to be situate conveniently near the market-place, and a farmer requested permission to place some sacks of potatoes in it, which was readily complied with, and the bitch watched the operation attentively, but offered no interruption. However, when the period arrived that the man wished to take away his potatoes, the bitch placed herself before the sacks, and by indications which could not be misunderstood, induced him not to persevere; in fact, he was under the necessity of applying to a member of the family, under whose protection he removed his potatoes. The farmer continued to make use of the yard for similar purposes for some time; but the bitch,

though she would quietly allow him to place anything within her territory, uniformly constrained him to seek some acknowledged authority for its removal.

When the creature in question was three years old, I went to reside at a small farm in the country, when she assumed the charge of the premises, and as soon as night set in, would allow no stranger to leave the house except by the front door. She knew all my pigs and poultry, and would allow no alien to intrude. Having, upon one occasion, a hatch of ducklings, it was not long before they made their way to a pit at a short distance from the premises, and when evening approached it was found difficult to get them out of the water in order to house them during the night. For this purpose, my wife and daughter had gone to the pit, accompanied by the bitch, and the latter attentively watched the endeavours of the two females to drive the ducklings out of the water; when at length she plunged in, caught one in her mouth, and conveyed it to my wife's hand without injuring it in the least; thus she successively brought out the whole; and this process she continued for several evenings, till in fact the young ducks had acquired so much strength that housing them was not deemed requisite. They were hatched under a hen.

From this bitch I obtained a litter of pups, the sire of which was a genuine Spanish pointer. After accommodating some of my friends, I reserved a whelp for my own use, and an extraordinary animal he proved. When twelve months old, he had attained a larger size and greater strength than ordinary, and prior to this period, had shown many indications of astonishing sagacity. He had be-

come exceedingly attached to the female part of my family, and particularly to the children. A little daughter, a child about six years of age, attended a school at the distance of a quarter of a mile, to which the dog uniformly accompanied her every morning as well as at noon ; and as soon as he had conducted his charge safely into the house, returned home. However, pursuing this system for a short time, he was not content with guarding the child to school, but began to escort her home. Twelve o'clock was the hour at which the children left the school for the purpose of coming home to dinner, a few minutes before which, *Frank*, (for that was the name by which the animal was distinguished,) with elevated tail, trotted away, and placing himself in front of the school, patiently waited till the little throng came out, when he eagerly selected his charge, and guarded her home with all the pride imaginable. At five o'clock in the afternoon a similar proceeding took place.

It was amusing—indeed, it was highly interesting—to witness the performance of these operations by this affectionate and sagacious creature. I have many times watched it with unspeakable pleasure. About ten minutes before 12 and 5 o'clock (how he contrived to calculate the time so exactly I am not able to describe) *Frank* left my premises, and in a minute or two appeared before the door of the school, where, squat on his haunches, he attentively waited the opening of the door : on such occasions, the children are crowded together, and *Frank* might be observed amongst them busily employed in selecting his charge. Dogs never appear fully satisfied of the identity till they have exercised their olfactory

organs, as well as their orbs of vision, on the object of their solicitude ; and, therefore, *Frank* always engaged a few grateful sniffs before he took his order of march, which was a few yards in advance, with elevated tail, and evidently in all the pride of self-satisfactory duty ; but, on the appearance of any person or any animal from which danger was to be apprehended, the dog came close to the child, and forbid near approach : he was particularly suspicious of the proximity of a beggar, or any mean or ruffianly person. The circumstance of the dog taking the child to school and escorting her from it formed a frequent topic of conversation in the neighbourhood ; and at length a lazy shoemaker, being half intoxicated, took it into his head to interrupt, or rather to interfere with *Frank* in the discharge of his spontaneous, but fondly-cherished duty ; accordingly, one evening he met the little girl and the dog returning. On perceiving his approach, *Frank* came close to his charge ; the fellow continued to advance ; *Frank* showed his teeth, placed himself in front of his young mistress, and seized the intruder with the utmost resolution and fierceness. The dog flew at the foolish fellow's throat, and either from the effects of liquor, the efforts of the dog, or fear—perhaps a mixture of all three—the latter fell, and the dog was instantly upon him : he tore his clothes, and severely lacerated his breast and his thighs before some of the family reached the spot, and released the man from a very unpleasant situation.

Frank was a remarkably powerful and a very handsome pointer ; his head was very large, and the anterior of it, or that part which may be assimilated

to the intellectual frontal in man, was more elevated than usual, compared with his own class (the pointer) of the canine tribe, which is distinguishable from many other varieties in these expressive and prominent features.

Anecdotes of dogs might be given sufficient to fill a large volume, and indeed a tolerable-sized duodecimo was, a few years ago, ushered into the world, made up entirely in this way; however, the preceding instances of that lower order of reasoning powers for which the dog is remarkable, fell under my own observation, and have never before appeared in print. Dogs with broad expansive heads, and elevated frontals or foreheads, will be uniformly found to be the most sagacious of the tribe, and indeed the gradations of sagacity, or powers of reason, will be found in the canine species, as it will through every order of animated nature, precisely in proportion to cerebral development. The head of the high-bred, smooth-coated greyhound is narrower and more compressed than that of any other kind of dog, his sagacity or mental manifestations are equally inferior, and in consequence he is susceptible of education only to a very limited extent.

I never had a pointer (and I have possessed many) who, whenever I appeared in a shooting-jacket, did not immediately testify his knowledge for what such a preparation was intended: moreover, if at any time I happened to click the cock of my gun in the house without having shown myself to the pointer, the latter would be instantly on the alert. Such of them as were loose would very earnestly watch the door, while such as were chained up would loudly evince,

and in a manner which could not be misunderstood, their consciousness of what was going on: the dogs, hearing the click of the gun, made as correct a deduction as possible; can such capability of drawing inference be correctly denominated instinct? Certainly not. It is an incontestable evidence of the god-like gift of reason, very inferior in degree or quality to that which falls to the lot of human beings, as well as of a lower order than that by which the elephant and the ouran-outang are distinguished: yet, as these gradations are beautifully systematic, as well as phrenologically correct, it thus becomes evident, that superior reasoning powers result from the superior organization or form of the cranium—a rule irrefragably applicable to every order of animated nature.

The pointer, from what may be called his high mental capacity, receives instructions with facility, and will ultimately acquire a degree of education which is utterly unattainable by the inferior varieties of a tribe which is branched out, from circumstances already noticed, almost to infinity. The education of the pointer for the use of the sportsman proceeds upon system or established principles, and he attains perfection from human instruction; yet, I have often been surprised at the acute susceptibility of well-bred (that is, large heads with prominent frontals) pointers during the period of probation. Some require very little instruction indeed. To the dog, *Frank*, already mentioned, no lessons were imparted for his attendance upon my little daughter, nor yet to his mother for fetching the ducklings out of the water—they were self-taught, or this knowledge was intuitive.

Hounds manifest a great degree of intelligence, and are consequently susceptible of superior education. It is highly interesting to see a huntsman and his two assistants (whippers-in) marshal a pack of foxhounds, and lead them to the field in order as regular as the march of a regiment of soldiers: it is very amusing to witness the operations at feeding-time, to observe the animals called, one by one, from the yard into the feeding-house; and, after having swallowed that portion of food which the huntsman deems necessary, each according to its constitution, to see them successively ordered from the troughs in the same manner, obeying the word of command with implicit submission.

Having remarked that superior pointers would be uniformly found to have large heads, the observation is equally applicable to hounds, either as regards beagles, harriers, or foxhounds. The first time I met the Staffordshire hounds, then under the management of Mr. Haye, (Mr. Wicksted hunted the same country afterwards,) I noticed a hound called *Gaoler*, and pointed him out as the best or most sagacious hound in the pack; which Mr. Haye admitted to be true, "but (added he) the hound is thought to be very ugly on account of his *very large head*!"

Some years ago, happening to be in that part of Cheshire where the kennels of Sir Harry Mainwaring are situated, I asked permission to see the hounds. The huntsman immediately accompanied me into the kennel, where, after making a remark or two upon the conformation of the head, quite new to the huntsman (W. Head), and at which he seemed much surprised, for more comprehensive observation

he turned the whole pack out upon the forest (Delamere Forest, where the kennels were then situated), sixty-three couple. I pointed out seven or eight as the best or most sagacious amongst them, to the truth of which the huntsman assented, with, however, surprise depicted on his countenance; and he inquired when I had seen the hounds out, as, he observed, "I never recollect seeing you in the field." I saw the Cheshire hounds then for the first time, but I have seen them many times since, and have witnessed their exertions with uncommon pleasure and satisfaction.

I have seen most of the foxhounds in the kingdom, both in the kennel and the field, and invariably found that observations similar to the preceding might be applied to every pack. Such must be the case, it cannot be otherwise.

It is not requisite, for the attainment of the object in view, to notice, or at least to descant upon, what may be called, in lieu of a more appropriate expression, collateral varieties, such as the wolf, the fox, and the jackal, compared with the dog: if they are considered a distinct class (which I am quite willing to allow), the close resemblance in form and manner, of habit and disposition, of the whole, render further elucidation unnecessary.

Animals of the cat kind come next under consideration; and, from the huge lion of Southern Africa, to the smallest variety of the tribe, the cat, as they all present the same physical form or organization, their feelings, propensities, and sagacity, will be found precisely similar. Nothing can be more ridiculous than those characteristic distinctions which

are frequently attributed to them by ignorant scribes, persons who have undertaken to write upon subjects which they do not understand, of which Bingley, the author or modeller of the 'Animal Biography' is a striking illustration. By such literary mountebanks a generous clemency is attributed to the lion, which, they say, the tiger does not possess, nor indeed any other of the feline species. Such pretty little playful nonsense may amuse children as well as unreflecting adults, but must be despised by the genuine physiologist and the true philosopher. A lion may be correctly regarded as a large cat; and a similar remark may be applied to the tiger, the panther, the leopard, &c.; nor will any other difference be found amongst the whole, except those variations of temper which we perceive in the human race, the horse, the dog, and indeed of animated beings in general, and which, in every case, may be traced to phrenological variation, susceptible, however, in domestic animals, of amelioration by education and proper treatment, as well as of more decided manifestation by a contrary course of conduct towards them.

Feline animals are inferior to the dog on the score of sagacity, and indeed in regard to all those qualities which render the latter so useful and so highly interesting to man. The structure of the head in the two species is very distinctly observable at first view. In the more ferocious varieties of the dog tribe, such as the mastiff and the bulldog, a prominence appears at the back part of the head, particularly behind the ears, a characteristic which will be found to distinguish feline animals in a still greater degree, from the

largest to the smallest kind ; and, in fact, a similar development will be perceived to characterize all ferocious creatures. However, although animals of the cat kind are very well known to be remarkable for the ferocity of their disposition, they do not possess that genuine courage which, in all ages of the world, has been so deservedly attributed to the dog, for the following reason—they are deficient (compared with the dog) of what phrenologists denominate the organs of firmness, situated at the superior elevation of the head.

The expansion and elevation of the frontal region of the dog's head is much greater than that of the cat, and in consequence his reasoning powers or sagacity is much superior. The cat is capable of receiving a certain degree of education ; but, being inferior to the dog in the development of the intellectual organs, she is unable to receive a variety of instructions which he comprehends with facility. It is not possible to teach a cat to fetch and carry, yet to what an extent the dog will perform such amusing tricks ! He will not only fetch things thrown to a distance in his sight, but very soon learns to fetch his master's glove, or any article which he is able to carry, (if deposited by the hand of his master,) for miles, though he has not witnessed the act of placing it, whatever it might happen to be. Some years ago, in riding along the lanes in the neighbourhood of Ormskirk, Lancashire, with my friend Mr. Bibby, as we passed some ducks in a pit by the road-side, "Take heed !" said he to his dog, who was earnestly looking at them. Nothing further occurred till we alighted at a house by the road-side,

distant something more than a mile, when "Hie back, Whimsey! Fetch the *mallard*!" set the dog off at full speed, nor had very many minutes elapsed ere Whimsey returned with the mallard in his mouth: what is more, he had not hurt the bird; for, on his master taking it from him, he threw it into the air, and it flew in the direction of home, where it no doubt very soon safely arrived. No system of education, no course of instruction, could render a cat capable of such feats.

A cat easily becomes located, will distinguish any person who resides in the house, may be taught a few tricks, and her natural ferocity may be softened or neutralized, in some degree, by education. Similar observations may be applied to the lion, and to all the species, allowing for the state of domestication, to which the cat has been so long subjected. But it is quite erroneous to suppose that the lion is capable of receiving education in a manner superior to the tiger, or to a greater extent; education will influence the two kinds in the same manner, as well as the panther, the leopard, and every descending variety.

The horse, from a state of unlimited freedom, has been so long subjected by man, that, like the dog or the cat, he must be regarded as a domestic. On the score of sagacity, he is not equal to the cat, and immeasurably inferior to the dog, either as to powers of perception or reflective faculties, the cause of which may be very distinctly traced in the comparative depression of the frontal region of the head.

Learned horses, some years ago, might be seen at many of the provincial fairs, a kind of exhibition which appears to have been eclipsed by the perform-

ance of these animals in the circus; and perhaps no person was ever successful to the same extent as Mr. Ducrow, in constraining the most elegant quadruped in the world to the most unnatural and the most painful contortions. Then this delightful animal is taught what are called "the airs of the manège," a system of contemptible frippery, painful to the horse, and which can be applied to no useful purpose. However, what I have stated shows that the horse is capable of receiving instruction; but I must confess I feel an insuperable aversion to a system of education which subjects the animal to absolute torture.

The degree of domestication which the horse has acquired shows that he is susceptible of mental impression. He recognises all those persons with whom he comes frequently in contact, and generally evinces a preference for his master; but the form of his head shows at once that all his actions, except those prompted by the imperious dictates of nature, must be under the immediate guidance of his human director, and that he is capable of reflection only to a very limited extent. Travellers speak highly of the sagacity of the Arabian horse, and I can believe that this genuine quadruped is superior to any other class of the species, because his frontal is more expansive, and I think more prominent. Amongst the inhabitants of the burning regions, where the Arabian horse is found, the animal is rendered more domestic than the horse of this country, by residing in the same habitation as the family to which he belongs; and when to this circumstance we add the superior cerebral development already noticed, it is not surprising that he

should acquire a degree of education unattainable by the rest of his fraternity. I have seen perhaps a score Arabian horses in this country, and uniformly experienced more than ordinary pleasure in contemplating them. I never met with a vicious Arabian. I shall be told perhaps that *Shebdeez* was a vicious horse, and he was said to be an Arabian. I saw *Shebdeez* many times; he was so vicious that no stranger could approach; and even those who attended him were always in danger. I never saw a horse show his teeth so viciously on every trifling occasion. The first time I saw *Shebdeez*, I felt not the least hesitation in pronouncing him not an Arabian. His head exhibited not the legitimate characteristic, his shoulder presented not the obliquity for which the true Arabian is remarkable, while his legs communicated to the touch neither the ivory-like hardness of bone, nor that bold development of tendon which is uniformly found in the little mountain horse: his barrel or carcase was equally unlike the professed prototype; his thighs and quarters were not sufficiently spread; he was much too large; finally, his action was lofty, if not lumbering, and he was destitute of speed. *Pacha*, a little brown Arabian, which reached this country by way of Egypt, I some years ago saw in Liverpool, and he presented a very different object for the inquiring eye of the natural philosopher, or the admirer of the horse; as did *Hassan*, a bay Arabian, which I saw at Tattersall's in the month of May, 1835. One description will answer for both, and indeed for all the Arabians which I have seen. When I opened the stable-door (*Hassan* was

in a box), I clearly perceived by the expression of his eye that he was as good-tempered as possible: I went up to him, and, although he appeared very vivacious, there was no indication of a vicious disposition. As nearly as I could guess by standing up to him, he was about fourteen three, and I cannot be far mistaken in my computation. He had the beautiful expansive frontal between the eyes, the taper nose, the oblique shoulder, the hardness of bone and large tendon, the round barrel and powerful quarters, by which the unquestionable Arabian horse may be always distinguished: his action was deer-like, light and elastic.

Our English breeders have succeeded in their endeavours to increase the size of the Arabian, by which they have enlarged the stride; but they have not been equally fortunate in regard to the shoulder, to the action, and, above all, to that frontal expansion, which has already been noticed as forming the criterion of sagacity; and therefore we cannot expect that our horses will testify an equal degree of the lower order of reason which is elicited by his paternal progenitor. Yet, it will be found, on attentive observation, that the inferior breeds of our horses are inferior in sagacity in proportion to their physical form; for instance, if we compare our thorough-bred horse to those of the cart kind, it will be seen that the latter are not so sagacious as the former; it will be found, that as the thorough-bred presents a superior frontal development to that of the cart-horse, his sagacity, and consequent susceptibility of education, are superior also.

The horse possesses the faculty of finding his way

home from a considerable distance. Some dozen years have rolled over my head since I met my friend, Mr. Robert Gill (of Richmond, Yorkshire), at the little town of Bowes, where we mounted each a pony for the purpose of proceeding to Weardale, intending to shoot on the Durham moors the following day (the 12th of August). There being no direct main road, in our progress we traversed a considerable quantity of moorland, threaded a number of lanes, and at length, after much inquiry, at twilight found ourselves on the border of an extensive common, intersected by numerous sheep-walks, over which, however, it was necessary for us to pass. The night did not become so dark but we were enabled to discern the summit of a mountain (pointed out to us by a shepherd), which served as a beacon to guide our way. We reached our quarters at 12 o'clock. After spending a week in Weardale, and amongst the mountains which surround it, we began to retrace our steps. Strangers to the way, whenever we were in doubt I strongly advised leaving the decision to our ponies, and they did not deceive us in a single instance. However, upon one occasion, two lanes were presented; the ponies leaned to the left, when my friend insisted they must be wrong. We therefore compelled the animals to take the right, which they did very unwillingly. After proceeding half a mile, we discovered our mistake; we returned, and did not afterwards oppose the will of our little sagacious nags. These animals had never been in this part of the country at any prior period; but having once proceeded for something more than thirty miles through a very intricate country, hav-

ing crossed moorlands, numerouslly intersected with sheep-walks, they were enabled unerringly to find their way back, and that without the least difficulty. The dog possesses this faculty in still greater perfection; indeed, it may be said to be general amongst quadrupeds, in which respect they are superior to man.

The hog, by a parity of reasoning, will be found superior in sagacity to the cow; but, as the latter is allowed a more familiar domestication than the former, and hence afforded more ample opportunity for mental manifestation, I will leave the hog out of the question, and proceed to compare the horse and the cow, though the comparison needs not much elucidation, nor does it indeed admit of much amplification.

The projection of the nose of the cow, and the consequent depression of the forehead, compared with the corresponding parts of the horse, cannot have escaped the notice of the most indifferent observer. I have seen learned horses and learned pigs, but I have never been fortunate enough to meet with a learned cow; because the animal is incapable of greater attainment than answering to its name, and those trifling recognitions which are chiefly prompted by its wants, and which are too well known to need enumeration in this place.

That useful animal, the sheep, is inferior to the cow in regard to sagacity, for reasons similar to those given in the preceding paragraph.

The deer tribe, though timid, obstinate, and head-strong creatures, evince, nevertheless, upon some occasions, an extraordinary degree of sagacity; for which, in some instances, we can account by their

sense of sight or smell, but which in others is absolutely inscrutable. I have seen these animals, the noble stag for instance, evince the greatest alarm at the sight or the smell of the very person with whom a short time afterwards I have seen him as familiar as possible. Some years ago, being in Knowsley Park (in Lancashire, the property of the Earl of Derby), attended by Francis Shaw, the keeper, and being anxious to get a near view of some fine red deer (stags and harts) I was informed by him it would be a difficult task, unless I attempted it alone, or at least without his company. By way of experiment, he changed his dress, and disguised himself as much as possible; yet, on attempting to approach them, they threw up their heads, stared at us for a few seconds, and scampered wildly away: nor was this all; in their flight, they happened to cross our track, or, in other words, came to a part of the park where we had been walking about an hour before, over which every one of them made an immense bound; thus proving they were well aware that the keeper had passed along the very part which they would not suffer to touch their feet: this knowledge they undoubtedly acquired by their exquisite sense of smell. Some months afterwards, I saw the very same deer, allow the keeper, the same Francis Shaw, to approach within a few yards of them, when they testified no alarm whatever, but stared at us with a sort of complacent inquiring curiosity. On the former occasion, when they testified so much alarm, it was the period of the year when venison is in season, and deer therefore shot; on the latter, the reverse happened to be the case, of which these animals

appeared perfectly conscious. For the following circumstance it is more difficult to account. When it has been determined to kill a deer, one is selected for the purpose, which the keeper endeavours to approach; yet, before he has been able to obtain a shot, the selected animal seems to be aware that the keeper has marked him for his victim; he will testify a greater degree of alarm than any of his fellows; and as the herd moves or is driven from place to place, the suspicious animal will be uniformly seen a short distance in advance, in the rear, or in some peculiar situation. How shall we account for this extraordinary prescience in the deer? It is beyond the limits of human investigation.

It would be rather irksome, both to the writer and to those who may honour his excogitations with perusal, to descant upon every order of living creatures; nor indeed is such a course requisite for the positive demonstration of my notions of physiological philosophy, and therefore I will proceed with the development of the more prominent features of my doctrine.

The rat, a diminutive animal, is inferior to the elephant in sagacity, but yet remarkably cunning. The frontal elevation of the rat's head is evident at the first glance; and, as it has principally taken up its abode with man, its habits and manners are well known. It is difficult to trap, and in avoiding danger, though hidden, or lurking beneath the most specious and alluring garb, the rat evinces extraordinary cunning. If poison be laid for rats, disguised as much as possible, if a few take it, the remainder become alarmed and quit the premises. However, to place the reasoning powers of this animal

in an unquestionable view, and also to show how far it is capable of receiving education, I will quote a page or two from the '*Memoirs of Henry Masers de la Tude,*' who, at the instigation of Madame de Pompadour, was imprisoned in the Bastile and other state prisons of France for the long period of thirty-six years:—

“ TAMING OF RATS.

“For a long time, I had enumerated amongst my greatest annoyances the presence of a crowd of rats, who came continually hunting for food and lodging in my straw. Sometimes, when I was asleep, they ran across my face, and, more than once, by biting me severely, occasioned the most acute suffering. Unable to get rid of them, and forced to live in their society, I conceived the idea of forming a friendship with them.

“The dungeons of the Bastile are octagonal; the one in which I was now confined had a loop-hole two feet and a half above the floor. On the inside it was two feet long, and about eighteen inches wide; but it gradually diminished towards the exterior, so that on the outside wall it scarcely exceeded three inches in size. From this loop-hole I derived the only light and air I was permitted to enjoy; the stone which formed the base of it served me also for chair and table. When, tired of reclining on a foul and infected pallet, I dragged myself to the loop-hole to enjoy a little fresh air; to lighten the weight of my chains, I rested my elbows and arms on this horizontal stone. Being one day in this attitude, I saw a large rat appear at the other extremity of the loop-hole;

I called to him; he looked at me, without manifesting any symptoms of fear: I gently threw him a piece of bread, taking care not to frighten him by any violent action. He approached—took the bread—went to a little distance to eat it, and appeared to solicit a second piece. I flung him another, but at a less distance; a third, still nearer; and so on by degrees. This continued as long as I had bread to give him; for, after satisfying his appetite, he carried off to a hole the fragments which he had not been able to devour. The following day he came again. I treated him with the same generosity, and added even a morsel of meat, which he appeared to find more palatable than the bread; for this time he ate near to me, which before he had not done. The third day he became sufficiently familiar to take what I offered him from my fingers.

“I had no idea where his dwelling-place was before, but he appeared inclined to change it, to approach nearer to me. He discovered on each side of the window a hole sufficiently large for his purpose; he examined them both, and fixed his abode in the one to the right, which appeared to him the most convenient. On the fifth day, for the first time he came to sleep there. The following morning he paid me a very early visit: I gave him his breakfast; when he had eaten heartily, he left me, and I saw him no more till the next day, when he came, according to custom. I saw, as soon as he issued from his hole, that he was not alone. I observed a female rat peeping from it, and apparently watching our proceedings. I tried to entice her out by throwing her bread and meat: she seemed much more timid than

the other, and for some time refused to take them ; however, at length she ventured out of the hole by degrees, and seized what I threw half-way towards her. Sometimes she quarrelled with the male ; and when she proved either stronger or more skilful, ran back to the hole carrying with her what she had taken. When this happened, the male rat crept close up to me for consolation ; and, to revenge himself on the other, ate what I gave him too far from the hole for her to venture to dispute it with him, but always pretending to exhibit his prize as if in bravado. He would then set himself on his haunches, holding the bread or meat between his fore paws like a monkey, and nibbling at it with an air of defiance.

“ One day the pride of the female conquered her shyness ; she sprang out, and seized between her teeth the morsel which the other was beginning to munch. Neither would let go, and they rolled over each other to the hole, into which the female, who was nearest to it, dragged the male after her. This extraordinary spectacle relieved by contrast the monotony of my ordinary sufferings and recollections. In the bustle of the world, it is difficult to conceive the pleasure I derived from such a trifling source ; but there are sensitive minds who will readily understand it.

“ When my dinner was brought in, I called my companions : the male ran to me immediately, the female, according to custom, came slowly and timidly, but at length approached close to me, and ventured to take what I offered her from my hand. Some time after, a third appeared,

which was much less ceremonious than my first acquaintances. After his second visit, he constituted himself one of the family, and made himself so perfectly at home, that he resolved to introduce his comrades. The next day he came, accompanied by two others, who, in the course of the week, brought five more; and thus, in less than a fortnight, our family circle consisted of ten large rats and myself. I gave each of them names, which they learned to distinguish. When I called them, they came to eat with me from the dish, or off the plate; but I found this unpleasant, and was soon forced to find them a dish for themselves, on account of their slovenly habits. They became so tame as to allow me to scratch their necks, and appeared pleased when I did so; but they would never permit me to touch them on the back. Sometimes I amused myself with making them play, and joining in their gambols. Occasionally I threw them a piece of meat scalding hot: the most eager ran to seize it, burned themselves, cried out, and left it; whilst the less greedy, who had waited patiently, took it when it was cold, and escaped into a corner, where they divided their prize: sometimes I made them jump up by holding a piece of meat or bread suspended in the air.

“There was among them a female whom I had christened *Rapino-Hirondelle*, on account of her agility; I took great pleasure in making her jump, and so confident was she of her superiority over all the others, that she never condescended to take what I held up for them. She placed herself in the attitude of a dog pointing game—allowed one of the rats to spring at the second morsel offered to him—and,

at the moment when he seized it, would dart forward and snatch it out of his mouth. It was unlucky for him if she missed her spring, for then she invariably seized him by the neck with her teeth as sharp as needles ; the other, yelling with pain, would leave his prey at the mercy of *Rapino-Hirondelle*, and creep into a corner to cure the wound she had inflicted on him.

“With these simple and innocent occupations, I continued for two years to divert my mind from constantly brooding over my miseries ; and now and then I surprised myself in a sensation of positive enjoyment. A bountiful Deity had no doubt created this solace for me ; and, when I gave myself up to it, in those happy moments the world disappeared. I thought no longer of men and their barbarities, but as a dream. My intellectual horizon was bounded by the walls of my prison ; my senses, my reason, my imagination, were centred within that narrow compass. I found myself in the midst of a family who loved and interested me ; why then should I wish to transport myself into another hemisphere, where I had met with nothing but assassins and executioners ?

“ One day when my straw had been changed, I observed among what had been newly brought a piece of elder, which had helped to tie it. This discovery caused an emotion I cannot describe. I conceived the idea of converting it into a flageolet, and the thought transported me. Hitherto I had heard no sounds within my dungeon but those of bolts and chains ; I could now vary them by a sweet and touching melody, and thus accelerate, in some degree,

the tardy step of time. What a fertile source of consolation ! But, how could I construct this flageolet ? My hands were confined within two iron rings, fixed to a bar of the same metal ; I could only move them by a most painful exertion, and I had no instrument to assist me. My gaolers would have refused me even a morsel of wood, had I been able to offer them treasures in exchange.

“ I contrived to take off the buckle which confined the waistband of my small-clothes. I used the irons on my legs to prepare it, and to bend the fork into a kind of small chisel ; but it proved so ineffective, that it was with the utmost difficulty I could cut the branch of elder, take out the pith, and shape it as I required. At last, after many attempts, and several months’ labour, I had the happiness to succeed. I call it happiness, for it truly was so ; I enjoy it to this hour with increasing interest. Thirty-four years have elapsed since I constructed this little instrument, and during that time it has never been a moment out of my possession. It formerly served to dissipate my cares, it now enhances my enjoyments.

“ The time occupied by these important labours in some degree distracted me from my domestic cares, and caused me to neglect my little family : during this interval, it had considerably augmented, and in less than a year it amounted to twenty-six. I was certain there were no strangers among them ; those who attempted to obtain admittance were received with hostility, and compelled to fight with the first who encountered them. These battles afforded me a most amusing spectacle. As soon as the two champions placed themselves in position, they ap-

peared at once to estimate their respective force before a blow was struck. The stronger gnashed his teeth, while the weaker uttered cries, and retreated slowly without turning his back, as if fearful lest his adversary should spring upon and destroy him. On the other hand, the stronger never attacks in front, which would expose him to the danger of having his eyes torn out; the method he adopts is ingenious and amusing: he places his head between his fore paws, and rolls head over heels two or three times, until the middle of his back comes in contact with his enemy's nose. The latter attempts to fly; the former selects that moment to seize him; he grasps him at once, and sometimes they fight most furiously. If any other rats are present, they remain passive spectators of the combat, and never join two against one."

As the anatomical conformation and physical organization of the mouse is precisely similar to that of the rat, its sagacity will be found in correspondence also.

We may continue to descend the admirably interesting chain of animated existence, and we shall find, that, while the gradation is as regular as possible, those creatures which present the most perfect physical forms, are equally conspicuous for their superior sagacity. But, as I have already observed, it is not necessary to enumerate the almost infinite ramifications of animated nature, in order to demonstrate the truth of an hypothesis, which upon very little consideration cannot fail to appear as evident as possible, established upon the incontrovertible principles of true physiology, and which amounts to this,

that, as in the different varieties of the human race the more perfect physical organization is uniformly attended with greater mental capacity, so, throughout the lower orders of nature, or what is called the brute creation, we shall find the same rule as precisely applicable as possible; and consequently, in the one as well as the other, the influence of education will be rendered perceptible according to the development of the mental capacity.

Passing over the weasel tribe, and many other classes of the lower order of quadrupeds, we come to a variety which would seem to unite the four-footed animals to the reptile, namely, the crocodile, the alligator, and the countless variety of lizards. The crocodile and the alligator are supposed by many to be merely two names for the same animal; but this is not the case: the former is not nearly so dark in its colour as the latter; it is a dusky, dirty-looking brown, while the alligator is nearly black: further, the crocodile is much thicker, attains a larger size, and possesses greater strength. If a young crocodile be held by the tail, it will turn up its mouth and bite the holder's hand; if a young alligator be held in the same manner, it is not able to raise itself for the purpose, being more slender in its form, and weaker. I am inclined to think the crocodile is to be found in Africa only, while the alligator is well known to be a native of America, and also of Asia, in many parts of which it is very numerous.

Those who have seen this hideously ugly creature, will most likely have noticed the depression of the head, which brings that part and the nose upon a level, or very nearly so; or, if at the moment when

viewing this disgusting animal, this conformation of the head, and its elongated anterior projection, did not particularly strike their attention, they will easily recollect, that such is precisely the case. I am doubtful if the least frontal elevation (or forehead) be observable, as the mechanism which enables the crocodile (and the alligator also) to move the upper jaw is situated in the place where the forehead should have appeared, had any such feature existed. Therefore, as the crocodile is inferior in physical organization to the lowest order of quadrupeds, its sagacity is inferior in the same proportion; its movements may be correctly regarded as the impulses of nature to supply its wants, beyond which its sagacity is scarcely discernible.

The tortoise must be placed very low in the scale of animated life. The volume of its brain is but trifling, and if it be removed, death does not ensue, as in the superior orders of animals; on the contrary, the tortoise becomes blind on losing its brain, but moves about as usual, and appears to experience no very great inconvenience. The tortoise, like the snake, becomes torpid at certain seasons, a further proof of its animal inferiority. I shall not tire my readers with wading through the ramifications of the reptile.

CHAPTER VI.

Birds.

THE feathered creation constitute an order of beings very different from those which have been hitherto brought under consideration, but which, nevertheless, afford incontestable evidence of the truth of the doctrine inculcated in these pages. The structure of the tenants of the air is wonderfully contrived to assist their aërial motions; in every part of their construction, they are active and buoyant, moulded for lightness, and shaped for celerity. The lungs of birds, compared with the lungs of quadrupeds, contain a provision remarkably calculated for the purpose of levitation, namely, a communication between the air-vessels of the lungs and the cavities of the body; so that by the intromission of air from one to the other, at the will, as it would appear, of the bird, its body can be distended, or compressed, according as it wishes to rise or descend.

Mr. John Hunter has stated, that the bones of birds contain air, which he imagined might be intended to render the act of flying more easy, by increasing their bulk and strength, without adding to their weight. The lungs are placed close to the backbone and ribs; the air entering into them by a canal from the wind-pipe, passes through, and is conveyed into a number of membraneous cells, which lie upon the sides of the pericardium, and communicate with those of the

sternum. In some birds these cells are continued down to the wings, and extend even to the pinions, thigh-bones, and other parts of the body, which can be distended with air at pleasure.

Proceeding upon the principle already laid down, I shall apply the same test to the feathered races as that by which I have endeavoured to show the uniform correspondence of physical organization and intellectual capacity in the various orders which have heretofore passed in review. The parrot, most obviously, claims the priority of attraction in the present section, in regard to the superior size and figure of its head, as well as in respect to those manifestations of sagacity which are too numerous, and too well known, to admit of doubt.

The late Colonel O'Kelly gave one hundred guineas for a parrot he happened to meet with at Bristol, which not only repeated a great number of sentences, but also answered many questions, and whistled a variety of tunes. It beat time with all the appearance of science ; and so accurate was its judgment, that if by chance it mistook a note, it would revert to the bar where the mistake was made, correct itself, and, still beating regular time, go through the whole with wonderful exactness. The death of this bird was thus announced in the *General Evening Post* for the 9th of October, 1802 :—" A few days ago died, in Half-Moon-street, Piccadilly, the celebrated parrot of Colonel O'Kelly. This singular bird sung a number of songs in perfect time and tune. She could express her wants articulately, and give her orders in a manner almost approaching to rationality. Her age was not known ; it was, however, more than thirty years ;

for, previously to that period, Colonel O'Kelly bought her at Bristol for one hundred guineas. The Colonel was repeatedly offered five hundred guineas a year for the bird, by persons who wished to make a public exhibition of her; but this, out of tenderness to the favourite, he constantly refused. The bird was dissected by Dr. Kennedy and Mr. Brooke; and the muscles of the larynx, which regulate the voice, were found, from the effect of practice, to be uncommonly strong."

The Comte de Buffon's sister had a parrot, that would frequently speak to itself, and seem to fancy that some person addressed it. Though this bird seemed pleased to hear the voice of children, yet it cherished an antipathy towards them, pursued and bit them till blood appeared. It had its objects of attachment; and, though its choice was not very nice, it was constant. It was excessively fond of the cook-maid; followed her everywhere, sought for, and seldom missed finding her. If she had been some time out of the bird's sight, it climbed to her shoulders, and lavished on her every possible caress. The girl happened to have a very sore finger, which was tedious in healing, and so painful as to make her scream. While she uttered her moans, the parrot never left her chamber. The first thing he did every day, was to pay her a visit; and this tender condolence lasted during the whole of the cure, when he returned to his former calm and settled attachment.

Parrots not only imitate discourse, but also mimic gestures and actions. Scaleger saw one that performed the dance of the Savoyards, at the same time that it repeated the song. Willoughby mentions a parrot, which, when a person said to it, "Laugh, Poll, laugh!" laughed accordingly, and the instant after screamed

out, "What a fool to make me laugh!" Another, which had grown old with its master, shared with him the infirmities of age. Being accustomed to hear scarcely anything but the words, "I am sick," when a person asked it, "How d'ye do, Poll?" it replied, in a doleful tone, stretching itself along, "I am sick."

In his 'Essay on the Human Understanding,' Mr. Locke has related an anecdote concerning a parrot, which he seems to have believed himself, however incredible it may appear. The story runs thus:—During the government of Prince Maurice, in Brazil, he had heard of an old parrot that was much celebrated for answering like a rational creature many of the common questions that were put to it. It was at a great distance, but so much had been said about it, that his curiosity was roused, and he directed it to be sent for. When it was introduced into the room where the Prince was sitting, in company with several Dutchmen, it immediately exclaimed in the Brazilian language, "What a company of white men are here!" They asked it, "Who is that white man?" (pointing to the Prince;) the bird replied, "Some general or other." When the attendants carried it up to him, he asked it, through the medium of an interpreter (for he was ignorant of its language), "From whence do you come?" The parrot answered, "From Marignan." The Prince asked, "To whom do you belong?" The bird replied, "To a Portuguese." He asked again, "What do you there?" It answered, "I look after the chickens!" The Prince, laughing, exclaimed, "You look after chickens!" The parrot, in answer, said, "Yes, I; and I know well enough how to do it," clucking at the same time, in imitation of the noise made by a hen to call her young together.

The power of imitating exactly articulate discourse implies in the parrot a very peculiar and perfect structure of organ; and the accuracy of its memory manifests a closeness of attention, and a strength of recollection, which no other bird possesses in so great a degree. Accordingly, all naturalists have noticed the superior conformation of its head. Its bill, round on the outside and hollow within, has in some measure the capacity of a mouth, and allows the tongue to play freely; and the sound, striking against the circular border of the lower mandible, is there modified as on a row of teeth, while the concavity of the upper mandible reflects it like a palate; hence the bird does not utter a whistling sound, but a full articulation.

From the parrot, we easily descend to the hawk or falcon tribe, as these birds are second to the parrot only in the size, as well as in the elevation, of the frontal region of the head; and, in consequence, they are susceptible of a greater degree of education than any other class of the feathered races, excepting that just mentioned. Amongst sportsmen of yore, hawk-ing was not only a favourite, but a general amusement; and, although it was superseded by the introduction of the gun or fowling-piece, it has not been altogether laid aside, as several establishments of this kind still exist in various parts of the kingdom.

However, as birds, from their inferiority of animal organization, or more imperfect form, constitute a lower order in the scale of animated nature, compared with quadrupeds, we must not expect instances of sagacity, or powers of mind, amongst the feathered races, equal to what has been related of several spe-

cies of quadrupeds. Yet, amongst them, as amongst every other genus, we shall find (to recur to the language of phrenologists) mental manifestation in exact correspondence with cerebral development.

The hawk tribe being very sagacious, swift of wing, and armed for war and rapine, were admirably calculated for aërial pursuit; much trouble became indispensable in training these birds; but in pursuing at a given signal, returning at the call, &c. &c., they acquired a degree of education, which superficial observation would have deemed unattainable. In order to break the monotony of a dull theme, and place the sagacity of birds of this class in an interesting view, I will quote the following anecdote of the common buzzard, which in this country may be frequently seen in woodlands sailing for hours together in slow circles, performing these lofty gyrations with the least exertion possible. I shall copy it from a letter of M. Fontaine, inserted in the work of the Comte de Buffon.

“In 1763 (says this gentleman), a buzzard was brought to me that had been taken in a snare. It was at first extremely wild and unpromising. I undertook to tame it; and I succeeded by leaving it to fast, and constraining it to come and take its food from my hand. By pursuing this plan, I brought it to be very familiar; and, after having shut it up about six weeks, I began to allow it a little liberty, taking the precaution, however, to tie both pinions of its wings. In this condition, it walked out into my garden, and returned when I called it to feed. After some time, when I judged that I could trust to its fidelity, I removed the ligatures, and fastened a

small bell, an inch and a half in diameter, above its talons, and also attached to its breast a bit of copper having my name engraved on it. I then gave it entire liberty, which it soon abused, for it took wing, and flew as far as the forest of Belesme. I gave it up for lost; but four hours after I saw it rush into my hall, which was open, pursued by five other buzzards, who had forced it to seek again its asylum.

“ After this adventure it ever preserved its fidelity to me, coming every night to sleep on my window; it grew so familiar as to seem to take singular pleasure in my company. It attended constantly at dinner; sat on a corner of the table, and very often caressed me with its head and bill, emitting a weak sharp cry, which, however, it sometimes softened. It is true that I alone had this privilege. It one day followed me when I was on horseback more than two leagues, flying above my head.

“ It had an aversion both to dogs and cats, nor was it in the least afraid of them; it had often tough battles with them, but always came off victorious. I had four very strong cats which I collected into my garden with my buzzard; I threw to them a bit of raw flesh; the nimblest cat seized it, the rest pursued, but the bird darted upon her body, bit her ears with his bill, and squeezed her sides with his talons so forcibly, that the cat was obliged to relinquish her prize. Often another cat snatched it the instant it dropped, but she suffered the same treatment, till at length the buzzard got entire possession of the plunder. He was so dexterous in his defence, that when he perceived himself assailed at once by the four cats, he took wing, and uttered a cry of exulta-

tion. At last, the cats, chagrined with their repeated disappointment, would no longer contend.

“ This buzzard had a singular antipathy ; he would not suffer a *red** cap on the head of any of the peasants ; and so alert was he in whipping it off, that they found their heads bare without knowing what was become of their caps. He also snatched wigs without doing any injury, and he carried these caps and wigs to the tallest tree in a neighbouring park, which was the ordinary deposit of his booty.

“ He would suffer no other bird of prey to enter his domain ; he attacked them very boldly and put them to flight. He did no mischief in my courtyard ; and the poultry, which at first dreaded him, grew insensibly reconciled to him. The chickens and ducklings received not the least harsh usage, and yet he bathed among the latter. But, what is singular, he was not gentle to my neighbours’ poultry ; and I was often obliged to publish that I would pay for the damage that he might occasion. However, he was frequently fired at, and, at different times, received fifteen pellets of shot without suffering any fracture. But once, early in the morning, hovering over the skirts of the forest, he dared to attack a fox, and the keeper observing him on the shoulders of the animal, fired two shots at him : the fox was killed, and the buzzard had his wing broken ; yet, notwithstanding this fracture, he escaped from the keeper, and was lost seven days. This man having discovered, from the noise of the bell, that he was

* This aversion to *red* would appear to be common to the falcon tribe, as I never had a hawk (and I have had many) that did not manifest the same antipathy.

my bird, came next morning to inform me. I sent to make search near the spot, but the bird could not be found, nor did it return till seven days after. I had been used to call him every evening with a whistle, which he did not answer for six days; but, on the seventh, I heard a feeble cry at a distance, which I judged to be that of my buzzard: I repeated the whistle, and heard the same cry. I proceeded to the place whence the sound came, and at last found my poor buzzard with his wing broken, who had travelled more than half a league on foot to regain his asylum, from which he was then distant about a hundred and twenty paces. Though he was extremely reduced, he gave me many caresses. It was six weeks before he was recruited, and his wounds were healed, after which he began to fly as before, and follow his old habits for about a year; he then disappeared for ever. I am convinced he was killed by accident, and that he would not have forsaken me from choice."

I have frequently had hawks, particularly that variety of those birds so often seen on moorlands, and known by the name of *Hobby*, that manifested surprising sagacity, were very obedient, and evinced great attachment. The compiler of the 'Beauties of Natural History,' speaking of the sparrow-hawk, observes, "I very well remember one that I had when a boy, that used to accompany me through the fields, catch his game, devour it at his leisure, and, after all, find me out, wherever I went; nor, after the first or second adventure of this kind, was I ever afraid of losing him. A peasant, however, one day, to my very great mortification, shot him, for having made too free with some of his poultry."

The owl tribe, from the size of the head (though owing to the superabundance of feathers with which it is surrounded, and the peculiar manner in which they are placed, the head appears larger than it is really found on investigation), would reasonably be supposed to possess more than an ordinary degree of sagacity ; but as, from the construction of their eyes, they are unable to distinguish objects in the broad glare of daylight, and their manners and habits thus becoming altogether nocturnal, their sagacity has seldom been put to the test. When a boy, I took a young owl (the barn or common white owl) from a nest, and kept it for eighteen months. Perceiving that it was anxious to hide itself from human gaze during the day, I formed a hole for it, a yard in length, of bricks, where it passed the day, but from which, on the approach of night, it sallied forth, displaying much activity and fierceness. It would come when called ; even in the day time, if called, it would approach the mouth of its hole and seize a piece of meat, with which it would instantly retreat, and it uniformly evinced a disposition to avoid the broad glare of day. It was amusing in its way : at dusk, it would strike a mouse, a bird, or a piece of meat, out of my hand with much dexterity, and I make no doubt that it was susceptible of education much in the same way as a hawk, could the requisite instructions have been imparted in the dusk of the evening, or during the night. This bird frequently rambled to considerable distances in the twilight, but always returned to his day retreat. His fate was melancholy : two of my schoolfellows (one of whom was the late Earl of Huntingdon) contrived to purloin

him, and, after tying him upon the back of a duck, placed this ill-assorted pair in a pond. I did not witness this mischievous exhibition; but, it seems, the duck, not liking its involuntary companion, no sooner got into the water than it dived, carrying the unfortunate owl under the water with it. On coming to the surface, the night-bird loudly testified its dislike to immersion by that peculiarly dismal noise for which these birds are remarkable, called *hooting*!—down went the duck again, and so the cruel business was continued till the duck became completely exhausted, and it and the owl drowned.

M. Cronstedt, who resided several years on a farm in Sudermania, near a steep mountain, on the summit of which a pair of large horned-owls had formed their nest, relates the following anecdote:—One day, in the month of July, a young one having quitted the nest, was seized by some of his servants. This bird was shut up in a large hen-coop; and the next morning, M. Cronstedt found a young partridge lying dead before the door of the coop. He immediately concluded that this provision had been brought thither by the old owls, which he supposed had been making search in the night time for their lost young one, and had been led to the place of its confinement by its cry. This proved to have been the case, by the same mark of attention being repeated for fourteen successive nights. The game which the old birds brought to their young one consisted principally of young partridges. One day a moor-fowl was brought, so fresh, that it was still warm under the wings. M. Cronstedt and his servant watched at a window several nights, that

they might observe, if possible, when these supplies were deposited. Their plan did not succeed; but it appeared that these owls had discovered the moment when the window was not watched, as food was found to have been deposited for the young bird one night when this had been the case. In the month of August the parent birds discontinued their attendance.

Eagles are the least sagacious of the falcon or hawk tribe; and on examination it will be found, that though their head is large, its superior size is conspicuous only in that part which denotes a fierce and cruel disposition; and that, compared with that beautiful bird, the peregrine falcon, the hobby, the sparrow-hawk, or the merlin, their frontal is very inferior—much depressed. Eagles soar to a very great height, and move steadily in the air, sailing in circles, but are not, as is generally supposed, swift on the wing; on the contrary, I am not aware of any bird that flies more slowly—I have watched them for hours.

We next come to the raven, a bird well known in this country, whose amusing tricks, in a domestic state, may be witnessed at the present moment in many parts of the country. The raven is a very bold bird, which, like all courageous animals, soon becomes familiar with man; few persons can have regarded it without perceiving the extraordinary sagacity indicated by its bold and mischievous-looking eye. The head of the raven is large, with a considerable frontal elevation; hence it is susceptible of a degree of education utterly unattainable by many classes of the feathered creation.

In a domestic state the raven is busy, inquisitive, and impudent: he goes everywhere, drives off the dogs, plays his tricks on the poultry, and is particularly assiduous in cultivating the good graces of the cook, who is generally his favourite in the family. He is a glutton by nature, and a thief by habit; he does not confine himself to petty depredations on the poultry or the larder, he aims at more magnificent plunder—at spoils that he can neither exhibit nor enjoy, but which, like a miser, he rests satisfied with having the satisfaction of sometimes visiting and contemplating in secret. A piece of money, a tea-spoon, or a ring, is always a tempting bait to his avarice; these he will slyly seize, and carry to his favourite hole or depository.

A gentleman's butler having missed many silver spoons and other articles, without being able to account for the mode in which they had disappeared, at last observed a tame raven that was kept about the house with one in his mouth, and, on watching him to his hiding-place, discovered there upwards of a dozen more.

Pliny informs us, that a raven which had been kept in the Temple of Castor flew down into the shop of a tailor, who was highly delighted with its visits. He taught the bird a variety of tricks, as well as to pronounce the names of the Emperor Tiberius and the whole of the imperial family. The tailor was beginning to grow rich by those who came to see this wonderful raven, till an envious neighbour, displeased at his success, killed the bird, and deprived the tailor of all his hopes of future fortune. The Romans, however, took the tailor's part; they

punished the man who had killed the bird, and gave the raven all the honours of a magnificent interment.

In the village of Sheephead, Leicestershire, a raven was kept by a carpenter, whose name I do not at this moment recollect (it was in my schoolboy days); but the bird was principally in the yard, which it had been taught to guard after the manner of a dog, and, in imitation of that animal, would snarl, bark, and bite: on the appearance of any youngsters, it would growl and come at them very fiercely, and thus kept the premises clear from intruders. It would also very distinctly articulate and pronounce several words.

Some years ago, being on a visit at the house of a relative in Duke-street, Grosvenor-square, London, I was surprised while breakfast was preparing to hear the word *Maria* distinctly pronounced; it was the name of my niece, and I could not exactly perceive whence the sound proceeded: it was quickly repeated—when down came a raven to the window, and continued to call *Maria*! till *Maria* appeared. The bird, it seems, belonged to a livery-stable keeper, in the neighbourhood of Grosvenor-square, and having in its rambles, some time previously, come in contact with *Maria* at the window, it was fed by her; and having been well received and kindly treated, its morning visits became as regular as possible. Poor *Maria* died some months afterwards, when the bird, having lost his friend, visited the place no more.

The rook and the carrion crow present much the same appearance as the raven, except that they are considerably smaller; but, on examination, it will be found that their heads are comparatively inferior in

size, particularly in the development or elevation of the frontal region. These birds are susceptible of education to a trifling extent : I tried the experiment on the rook. I procured a young rook from the nest before it was fledged, fed and regularly attended it. The bird became very familiar, and when three months old, would accompany me in the garden, as well as short distances from home. In vain I endeavoured to teach it to pronounce a plain short word ; it never evinced a great degree of sagacity. At length, it was shot by one of my neighbours, I believe unintentionally.

I tried a similar experiment on a jackdaw. This bird learned to pronounce several words distinctly, was very sagacious as well as very mischievous ; was as fond of thieving as the raven, and testified an inveterate antipathy to children, whose legs it would bite most severely. Ultimately it was drowned in a well, into which it had accidentally fallen.

If we compare the rook or the carrion crow with the jackdaw, we shall find, that, although to superficial observation they appear much the same (except in size), the shape and size of the head present a striking variation, particularly in that part to which phrenologists ascribe the seat of intellect—the elevation of the jackdaw's frontal, as well as the superior size of his head, is remarkable.

I have repeatedly tried the experiment on the magpie, followed by similar results, for similar reasons. The jay is equally susceptible of education, its head being formed much in the same manner.

The starling offers a striking illustration of the truth of my hypothesis. The head of this well-known bird

is remarkably large, the frontal very much elevated. The starling becomes very familiar, and is easily taught to pronounce words and even short sentences. "I can't get out," said the starling, has been immortally recorded in the 'Sentimental Journey.' I have had several starlings which evinced much sagacity: one of them, in addition to pronouncing several words, would come when he was called as readily as a dog. The signal word was *Jacob*, to which he always flew with alacrity, if within hearing. But I could never teach either the blackbird or the thrush to articulate a single word, for reasons already given.

If we descend to the yet smaller classes of the feathered race, we shall find the same rule or test equally applicable. The goldfinch is not remarkable for its powers of song; but, if placed by the side of a canary, the superior size of its head, and the greater elevation of its frontal, become conspicuous. There are few persons but have witnessed exhibitions of the feats of birds, and if such persons will recollect, they will find that the feathered performers were principally goldfinches. Some years ago, the *Sieur Roman* exhibited in this country the wonderful performances of his birds; these were principally, if not wholly, goldfinches. One appeared dead, and was held up by the foot without exhibiting any signs of life. A second stood on its head with its feet in the air. A third imitated a Dutch milk-maid going to market, with pails on its shoulders. A fourth mimicked a Venetian girl looking out at a window. A fifth appeared as a soldier, and mounted guard as a sentinel. The sixth was a cannonier, with a cap on its head, and a match in its claw with which it discharged a

small cannon ; the same also acted as if it had been wounded. The seventh turned a kind of mill. The last bird stood in the midst of some fire-works, which were discharged all round it.

A goldfinch caught by bird-lime, apparently about two years old, became familiar in a few days, and in the course of two or three weeks was taught to draw up its water, and all that variety of ordinary tricks for which these birds are distinguished. The same experiment was tried on a canary, without success.

It appears quite unnecessary to multiply examples further, or to descend to the yet lower orders of animated nature, for the purpose of elucidating what must already appear sufficiently clear ; or to add confirmation to a system, the truth of which can only be dogmatically called in question, but which calm investigation, upon the principles of reason and common sense, cannot fail to demonstrate and establish.

ELUCIDATORY DISQUISITION.

In those parts of the preceding pages where the varieties of the human race are mentioned, let it be borne in mind, that the object has been not so much exact classification as to show, that mental manifestation is, and must be, the result of cerebral development, and that superior intellectual capacity results from pre-eminent animal or physical conformation ; yet the divisions of the *genus Homo* by the most eminent physiologists have been noticed, and have indeed formed the bases of my gradatory observations. And although those writers to whom I have referred do not exactly agree as to the absolute correctness of

each other's classification, that circumstance, trivial in every point of view, amounts to nothing as far as the object of this publication is concerned: for instance, if we include under the Mongolian variety of the human race the Calmucs, the Tartars (or Tatars), &c., a deviation may be traced, which merits attention no further than to prevent misconception. I am inclined to think that the original Chinese, though always referable to the Mongolian class, differed in some degree from the present race of these people. When the Tartars conquered China, they settled in the country, and hence, by a commixture with what may be called the aborigines, produced the trifling alteration to which I allude. The Tartars are included in the Mongolian variety; and it may therefore easily be perceived, that, although the various tribes of mankind are clearly susceptible of classification, shades of difference may become observable, though not in the least affecting the leading distinctions of each well-defined variety.

That division of man which has been designated the Malay variety, is remarkable for its diversification. It includes not only the inhabitants of the peninsula of Malacca, of Sumatra, Java, Borneo, Celebes, and the adjacent Asiatic Islands, but also those of New Holland, Van Diemen's Land, New Guinea, and the islands scattered through the whole of the South Sea. However, the former (those of the Asiatic islands) may be regarded as improved Malays, owing to their long connexion with the whites; while the latter (the South Sea Islanders) are perhaps the most degraded race to be met with on the surface of the globe. Having already noticed the treatment by

these monsters of Mrs. Guard, and the crew of the *Harriet*, I will quote a few words from Mrs. Frazer's harrowing account of the same people. "The stories which we have read in our childhood, and the representations we have seen in theatres of savage life, are mere trifles compared with the real facts. When first I heard their frightful yell, I looked for nothing but destruction; but I never expected to witness anything like what I have seen. There is no difference between these savages and the beasts of the forest, except that the savages are ingenious in their cruelty. All that the race of man can conceive falls short of what I have witnessed."—Mrs. Frazer (the reader will recollect) was one of those who unfortunately fell into the hands of the savages from the wreck of the *Stirling Castle*, in May, 1836. She and three men only escaped death, the remainder of the crew were inhumanly butchered, and even devoured.

A doubt has been insinuated as to Mrs. Frazer's veracity; but the truth of her statement was corroborated by several of the crew of the *Stirling Castle*, who were fortunate enough to escape also: above all, Lieutenant Otter, by whom Mrs. Frazer was rescued, and whose account is beyond the reach of suspicion, confirmed her story; it runs thus:—

"Moreton Bay, Sept., 1836.

"I got a week's leave of absence to go down to the bay for the purpose of amusing myself with catching turtle. The wind proved favourable for the sport when we had got to the pilot's station, and after remaining a few days there, I thought I would take a day's shooting at a place called Brisby's Island, which is situated on the north side of the bay. I accord-

ingly proceeded to that place, and whilst out with my gun fell in with two men, whom I took to be natives. When they came up, however, they addressed me, to my astonishment, in English, and told me that they were part of the crew of a vessel called the *Stirling Castle*, which had sailed from Sydney to Singapore about three months previously, and had been wrecked on one of the Bornean reefs, near the entrance of Torres Straits. The whole of the crew, with the captain (Frazer), his wife, and two mates, had got away from the wreck after a fortnight's dreadful suffering. One of the boats, in which were the above-mentioned persons and some sailors, eleven in all, had been forced to beach a little below Sandy Cape, about 200 miles to the northward of this; the other boat had parted from them a few days before, and they saw no more of it. They went on to say, that soon after their landing, the natives came down and took everything from them that they had saved, stripped them all perfectly naked, forced them to fetch wood and water, and treated them with the most savage cruelty. They themselves, with another, who had been obliged from weakness to stop about twenty-five miles behind, had managed to get across to the main land, for they had run the boat ashore on an island. After travelling for six weeks along the coast, in which journey they suffered uncommon hardships from the cruelty of the different tribes they fell in with, they most providentially had arrived at Brisby's Island just in time to meet with me. They had crossed the narrow channel which separates this island from the main land the day before I arrived, and as I was to leave the next morning, it would

have been long before they would have been seen or heard of, as the island is hardly ever visited, and they did not know themselves where they were, or how far from the settlement.

“ I immediately despatched two men after the unfortunate fellow who had been left behind, and he was brought to me naked, and as black as the two others. After that I started for the settlement (Moreton Bay). On reporting the circumstance to the commandant, Captain Friars, two whale-boats were got ready, and being provisioned for three weeks, the command of the squadron was given to me for the purpose of endeavouring to rescue the remainder of the crew, particularly the unfortunate lady, who was treated with as much cruelty as any of the rest, the savages having no regard for the fair sex. We now proceeded, with soups, wine, clothes, &c., for the men, and I was furnished by two ladies of the settlement with female attire for Mrs. Frazer. A person accompanied me as interpreter, and proved of the greatest service, as he had formerly been a runaway, and had resided nearly six years amongst the natives, with whose language he was well acquainted.

“ We lost no time in getting out to sea, and in two days after leaving the pilot-station we put into a river about seventy miles to the northward, as we expected intelligence from some of the natives. After some trouble, Graham, our interpreter, heard of two white men being in the native camp, and by promising hatchets to the savages he induced them to bring the white men in. The poor fellows were wild with joy at seeing us, and could hardly

believe their senses, as they never expected to be liberated. They told us, that the captain and first mate had sunk under their sufferings; that Mrs. Frazer was alive when they last saw her, at a place about forty miles off, but undergoing every hardship, and that two of the crew were drowned in endeavouring to swim the channel. I now sent one boat round the next point, about forty or fifty miles distant, whilst I started off on foot with three others, armed only with pistols, for fear of alarming the Blacks, who are much afraid of a gun. When we had proceeded about six miles, the treacherous wretches attacked us with clubs, and forced us back to the boats, as we were hardly able to keep them off with our pistols, which they had but little fear of. We were obliged to fire at them several times in our own defence, although much against my wish, as I was afraid of their retaliating upon the unhappy people in their power. We now embarked, and followed the former boat round the aforesaid point into a wide bay, which we reached before night. About two days afterwards we got the second mate, and such a miserable skeleton I never beheld, quite black and naked. The account of his sufferings was horrible, as he had been tortured in a variety of ways, because he was too weak to drag the heavy logs of firewood in obedience to the wishes of the savages.

“ We learned, to our mortification, that Mrs. Frazer, who had been some time alone amongst the savages, had only a few days before passed the very spot where we were, but that she had been carried off by a large party of Blacks, who were going to fight another tribe

some forty miles distant, and Graham told me he knew the very spot where she was. I sent him off directly to the place, he having previously stripped himself—the only way of escaping ill-usage from these brutes, and I followed the next morning along the beach, to support him, if it should be requisite, accompanied by three men, well armed with muskets this time.

“ After we had gone about thirty miles, we came to a mark in the sand—the signal agreed upon for us to stop and wait for him. We had not been here half an hour, when he appeared with four natives on the top of the cliff above us. When he came down the hill, the Blacks, on seeing us armed, attempted to move away, but he persuaded them, by promises of hatchets, to turn back. I went up to meet him, and you may conceive my joy and satisfaction when he told me Mrs. Frazer was waiting on the top of the hill until I sent her a cloak. I immediately gave him a cloak and petticoat, and shortly afterwards she appeared. You never saw such an object. Although only thirty-eight years of age, she looked like an old woman of seventy; perfectly black, and dreadfully crippled from the sufferings she had undergone. I went to meet her, and she caught my hand, burst into tears, and sank down quite exhausted. She was a mere skeleton, the skin literally hanging upon her bones, whilst her legs were a mass of sores, where the savages had tortured her with firebrands. Notwithstanding her miserable plight, it was absolutely necessary for us to start homewards, though she had already come nine or ten miles, as there were about three hundred natives in the camp, who, Graham

said, would most likely attack us in the night, for many of them had been unwilling to give her up. He had fortunately met with one of his former friends, a kind of chief, through whose influence he had succeeded. So treacherous are the natives, that it is impossible to trust one of them for a moment.

“ After having given the poor woman some port wine, which I had brought with me in a flask, and some tea, which she thought was nectar from heaven, she insisted upon immediately setting out, though we had nearly thirty miles to walk. On the road she gave me a dismal account of her hardships and privations, interrupting herself with bursts of gratitude which it was painful to listen to. Her husband had been speared before her face about a month back, and had gradually pined until his death, totally neglected. Any attempt of her's to approach him was followed by blows on the head. When he died, they dragged the body away by the heels, and buried it in the sand. The unfortunate first mate suffered still more; they burnt his legs with firebrands to such a degree, that on his crawling into the water the flesh all dropped off from the bones, which were laid bare up to the knees, and in this state he lay helpless, and was starved to death. On one occasion, when she attempted to take him a few cockles, they knocked her down with a club, and dragged her through a pond by the arms and legs.

“ When we met her she had been two days without food, and had subsisted the most part of the time on a kind of fern-root, which is found in the swamps. Now and then she would get the tail or fin of a fish,

when the savages had a superabundance. This she was obliged to earn by dragging heavy logs of wood, and fetching water, and she was not allowed to enter their huts; but, destitute of all covering as she was, she was obliged to lie out the whole night, even in the heaviest rains. This is but a slight sketch of what she went through; a detailed account would fill a quire of paper. When we had got about half way to our boats, we were obliged to carry her in turns. We did not arrive until the next morning, when, after taking some rest, she begged I would send her some hot water to her tent, as she was anxious to restore her face and person to their natural colour. I suspect she found it no easy task, as, besides her exposure to the sun and wind, the natives, in order to bring her as near as possible to their own complexion, had rubbed her every day with charcoal and fat.

“Our only anxiety was to get away, as we had accomplished our errand, and the Blacks were keeping us constantly on the watch. We were detained by contrary winds for four days, during which one of our men got a spear sent through his thigh. At length we had a fair breeze, and reached the settlement in two days and a night.

“Since our arrival, Mrs. Frazer has been suffering very much from the effects of her hardships, which showed themselves in pains in her limbs and joints. She is now coming fast round, and I dare say will be soon quite well.”

These savage tribes vary in colour, some being black, others copper-coloured; further, in some the hair is curly, in others straight. I have examined a

number of skulls of these savages, and uniformly found a compressed and receding frontal, as well as all those cerebral characteristics for which the lowest grades of human nature are remarkable, and which assimilate the savage to the brute creation.

Indeed, it would appear, that in the division of the human race, colour has not been sufficiently regarded. The White man admits of two sections, the Caucasian and the Mongolian. The Red man of America stands alone. At the head of the Black division must be placed the Hindoo, followed by the Malay, and lastly, by the Negro. It is very well known that the Spaniards, the Arabs, and indeed the greater part of those people included in the white varieties of human nature, exhibit a swarthy, or very dark appearance; yet there is nothing in their colour which will identify it with the black division of their fellow-men. On the contrary, if we consider the three varieties of the latter, we shall find, that although they differ very much in the form and expression of the countenance, yet, as relates to the characteristic of colour, they are referable to one and the same class—the colour of the eye, for instance, is similar in all. Further, that effluvium which exudes from the skin of the Blacks is very perceptible in the Hindoo, stronger in the Malay, and superlatively so in the Negro.

The Hindoo may be regarded in the black division of our species as equivalent with the Caucasian variety of the white, and in his well-developed features may be frequently observed an impressive approximation towards those of the white man; generally speaking, the countenances of the Hindoos are much more intellectual than those of the lower varieties

of the same division, while the ancient monuments or mementos of these people, though immeasurably inferior to those of the ancient Greeks and Romans, incontestably prove their comparative superiority.

The Red man of America is referable neither to the white nor the black variety. As this vast country differs geologically from the other three quarters of the globe, so its animal productions are at variance also: the beasts which inhabit its boundless savannas and almost interminable forests, are not precisely similar to those of Asia, Africa, or Europe; a similar observation may be applied to the feathered tribes which animate its dismal swamps and gloomy wildernesses; therefore, as if to maintain a sort of corresponding exclusiveness, we find its aborigines inclassable with either the white or the black division of the human race, or yet with any of the varieties of which these classes are composed.

Let it be duly impressed upon the mind of the reader, that, where the varieties have intermingled, it not only precludes distinct classification, but renders definite opinion impossible; and yet, owing to the improvement in navigation, and the consequent extension of commerce, this mixture of blood, though very undesirable, is common enough in all those parts of the world where different people have been brought together. If, however, we duly consider these mongrel productions, we shall perceive the powerful support which the hypothesis advocated in these pages receives from the evidence of facts. A Mulatto is the production of the Negro and the white; if the white and the Mulatto become connected, the production is a Quadroon; if the Mulatto approach the

Negro, the Samboe is the result: the superiority of the Quadroon to the Samboe, in beauty of conformation and intellectual capacity, is remarkable.

If, with the descending links in the chain of human nature, an inferiority of animal organization and mental capacity become conspicuous, a preponderance of the baser feelings is rendered remarkably perceptible also. All savages are cowardly, inclined to thieving, and intolerably cruel. In these respects, the Indian of America, the Negro, and the savage of the South Sea Islands, appear much the same, equally insusceptible of civilization, equally inclined to cannibalism, equally approximating the brute. Whenever these lowest grades in the scale of human existence have come in contact with the whites, they have uniformly evinced the propensities to which I have above alluded, when they happened to be the stronger party, and were only restrained from the relentless exercise of them by the fear of punishment staring them in the face.

The Haytian Republic.—The large island of Hayti, or St. Domingo, was the first place at which Columbus touched in his celebrated discovery of America. The original population of 1,000,000 dwindled into less than a fourth of that number, owing to the oppressive cruelty of the Spaniards; and when at length, Negroes were introduced for the purpose of cultivating the soil, the aborigines disappeared before the progress of commerce and colonization. In process of time, the French acquired a settlement at St. Domingo, and the island was divided between them and the Spaniards. When the French Revolution burst forth like a volcano, the explosion re-echoed throughout St. Domingo, and many of

the respectable settlers and planters, who had long groaned under European oppression, caught the idea of emancipation, and excited the Negroes to assist them in throwing off the intolerable yoke. As an historical detail of subsequent events is not the object of this publication, but the establishment of the degrees of intellectual capacity upon physiological bases, I have merely to observe, that all those leaders who distinguished themselves in the revolution of St. Domingo, were allied to the white man, most of them very nearly. Toussaint l'Ouverture was a Mulatto or Quadroon. Petion, the most distinguished amongst them for mental ability, made a nearer approach to white blood—he was a Mæsti, the offspring of the white and the Quadroon. Dessalines exhibited the darkest complexion of any of these St. Domingo chiefs, and his mind was formed to correspond with his physiological inferiority: ignorant, capricious, and cruel, he was no sooner possessed of supreme power, than he became a relentless tyrant; his intolerable proceedings excited revolt, and he was very unceremoniously put to death.

When at length foreign enemies had been completely baffled, and civil commotion had given place to something like order and regular government, it must be admitted that the fairest possible opportunity was offered to the Black to prove what was so positively advanced by thousands of the unreflecting part of the community—his intellectual equality with his white brother. Many years have elapsed since the black population of St. Domingo settled under what may be called their own government, with the assistance, be it remembered, of many Europeans,

and that superior mixture which could not fail to arise under the circumstances of long and extensive colonization, like that of the island in question; yet, what has been the result? Has the Republic of St. Domingo, like the republics of old, or that of the modern United States, raised itself to importance or even respectability? No. It has sunk to nothingness—beneath even contempt! One of the most productive places in the world, the once dazzling importance of St. Domingo, is no longer perceptible; it has vanished before the baneful influence of its dark inhabitants; smiling cultivation and lucrative commerce have been superseded by indolent neglect and insolent incapacity;—sloth and misery have become the predominating characteristic of this extensive and once-abundantly fruitful island.

Let us do everything possible to improve the condition of the Negro; but let us view him as he is, as Nature intended him: when, however, it is professed or pretended to raise the savage in the scale of human society to an equality with the white man, nothing can be more inconsistent, more ridiculous, or more in opposition to the order of nature.

In the preceding part of this little volume, it has been stated that the white man has never been known to exist in a savage state (except individual instances, where crime or unaccountable propensity has been the cause); wherever a white population has been formed, indubitable marks of civilization have uniformly been perceptible, however adverse circumstances might have prevented that progress in the arts and sciences which more fortunate nations had attained.

Conclusive Observations.—Notwithstanding the progress made by the ancients in true philosophy, they were utterly unacquainted with a science yet in its infancy, which, on its first discovery, assumed the name of Craniology, but which has since been more appropriately perhaps denominated Phrenology. However, though not aware of the fundamental principles of the science in question, they perceived that the intellectual capacity was rendered manifest in the expression of the countenance, and they thus became enabled to measure the mind, or ascertain its quality, to a certain extent, merely by the superficial observation of physiognomy. They became well aware that genius or superior mental capacity never lurked beneath a low or depressed frontal, but was uniformly indicated by that capacious elevated brow which we find so conspicuous in Bacon, as well as in every other person distinguished for extraordinary genius or very profound knowledge. Hence, in the justly-celebrated statuary of the Greeks we perceive the foreheads of their deities and heroes uniformly elevated and expansive. The Greeks, ignorant of phrenology, appear nevertheless to have been skilful physiognomists; like the Germans, they had their Lavater, as is evident from the anecdote related of Socrates, who was told by an Athenian physiognomist, that “he was at heart a rake,” notwithstanding the sobriety of his deportment. The philosopher admitted the truth of the observation, and said it was only by the influence of reason, and determined perseverance in an opposite course, that he had been able to counteract his vicious propensities.

Lavater evinced considerable tact as a physiognomist ; but, as he was utterly unacquainted with that classification of the organs of the brain discovered by Gall, and improved by Spurzheim, Coombe, and others, implicit confidence could not be placed in his opinions : physiognomy, unless based upon the principles of phrenology, amounts to nothing more than superficial observation ; but, when the superstructure (physiognomy) is raised upon the genuine foundation (phrenology), it becomes a science worthy the attention, not only of the professed philosopher, but of every person capable of reflection, and anxious to improve the faculties of his mind.

I am well aware that it is customary to sneer at phrenology ; but those who deride the yet infant science will be found, in most instances, if not in all, utterly unacquainted with it : it has many times happened, when, in the course of conversation, I have heard phrenology unhesitatingly condemned, that I have inquired if the unqualified dissentient had studied the subject ? I have uniformly found that it was thus sweepingly decried by persons whose positive ignorance incapacitated them from forming an opinion upon it. Many years must elapse before phrenology will be generally understood, because considerable study, and some degree of talent, are requisite for its attainment ; but that it forms the true elements of mental philosophy, and will ultimately be so acknowledged, I entertain not the slightest doubt. If one single instance can be brought forward of superior intellectual capacity, or great powers of mind, accompanying a receding and narrow forehead, phrenology must be given up ; but no

such union does, or *can*, exist; I defy the most inveterate opponent of the science to substantiate a case in point: surely, then, this is positive proof that the fundamental principles of phrenology are correct.

Some years ago, I placed Spurzheim's "Phrenology, or the Doctrine of the Mind, and of the Relations between its Manifestations and the Body," in the hands of a person whom I occasionally met, in consequence of his expressing a wish to "*look into the subject.*" In a short time, he returned the book, saying, he was "perfectly convinced of the absurdity of phenology:" but, an uneasiness of manner, as he expressed himself, convinced me he was not speaking the thoughts of his mind; however, I was prepared to expect something of this sort, aware of the character of the person who thus affected to condemn a science in opposition to self-conviction. In this person's cranium, the organs of self-esteem, secretiveness, acquisitiveness, and marvellousness, were conspicuously developed; conscientiousness was depressed; benevolence rather large; the perceptive faculties appeared prominent; the reflective (comparison and causality) small. The mental manifestations, as I had witnessed on many occasions, corresponded with such a cerebral development. The individual affected to be humane, generous, and charitable; and, under this specious cloak, contrived to purloin and "play such antics before high Heaven as would make the angels weep," but which he concealed, with uncommon dexterity, from the prying gaze of his fellow-mortals in general. The perusal of Spurzheim convinced him of the truth of phrenology, as exem-

plified in his own person ; and as truth is sometimes unpalatable, in this case it was particularly so, as it held "the mirror up to nature, showing vice her own image" most potently.

The advantages to be derived to civilized society from the study of phrenology are incalculable, since, in early life, the mental faculties are so pliable, that, by the aid of this extraordinary discovery, that impressive apothegm, of "train up a child in the way he should go," may be powerfully and effectually brought into operation. If, for example, by the assistance of phrenology, it be perceived, that a child exhibits a preponderating development of the organs of acquisitiveness, secretiveness, and firmness, he will be inclined to thieving or picking pockets, or both, if his station be in the lower or lowest grade of society—and indeed there are not wanting numerous examples, where persons moving in a highly respectable or elevated sphere have not been able to withstand the temptation to pilfer;—if, I repeat, it be ascertained that such a cerebral development presents itself in the head of a child, every care should be taken to direct its attention continually towards the exercise of the opposite qualities or propensities, and a horror of evil ways impressed upon its ductile mind ; when the organs above mentioned would lose their activity, and those of an opposite tendency would be brought into vigorous action, and, like the muscles in the arms of the smith, would increase in development and strength accordingly. Hence may be perceived the immense advantage of phrenology, since it has been well ascertained, that if any of the organs be rendered inactive, they decrease in size, and conse-

quently in strength also. A madman, at least a person labouring under a degree of delirium that supersedes the use of the intellectual faculties, will experience a depression of the forehead in proportion to the length of time during which the exercise of these faculties has continued suspended—until at length they become extinct. George III. was a striking proof of the truth of what I have just advanced : it is well known, this monarch was confined for some years before his death, labouring under delirium or madness, which completely prostrated his powers of reflection ; and in consequence, his forehead receded so much, became so flattened, that nothing but ocular demonstration could have produced conviction so great an alteration was possible. Whenever the organs of the brain are stimulated to activity, they will increase in size and vigour ; whenever they are rendered inactive, they will ultimately become dormant, or as nearly so as possible. So that, if evil propensities were thus held in check, and laudable feelings promoted and encouraged, in the young mind particularly, much of the misery of society might be avoided.

In regard to education, pursuits in life, or the means of a livelihood, phrenology is admirably calculated to guide the judgment of parents, and those who have the charge or superintendence of youth. By the assistance of this extraordinary discovery, this highly useful and instructive science, school-masters might direct the attention of their pupils to those branches of knowledge adapted for their peculiar capacities, which would prevent vexation on one part, and disgust on the other, as well as

supersede those coercive measures which have so frequently disgraced our seminaries and school establishments. By the same rule, when it became necessary to apprentice a boy to a trade or profession, the judgment of the parent or guardian should be guided by the preponderating development of the organs of the brain, when a satisfactory result might be confidently anticipated.

If we look at the reverse of this plan, or rather at the customary mode of placing youth for probationary instruction, we shall discover that many make so little progress towards proficiency in their ulterior avocation, as to be unable to procure the means of subsistence by the exercise of it; while others, disgusted with a calling to which their inclination would never have led them, seek some other avocation. The late Mr. John Scott, who attained such distinction as an animal engraver, was brought up a tallowchandler; but, disliking the business in which he had been so injudiciously placed, he became his own instructor in an art for which nature had so eminently qualified him, and attained a degree of almost unparalleled excellence. Many (the greater part, I believe) of men eminent in the arts and sciences, from the earliest period to the present time, have acquired their superior skill without that course of instruction which is generally regarded as indispensable. Nor indeed is it possible for any person to excel in an avocation for which he is not calculated, or for the attainment of which nature has denied him the requisite capacity.

Wolf persevered through every difficulty to eminence as a soldier; and although at an early age he

breathed his last on the heights of Abraham, he displayed through every successive grade in the profession which he had chosen extraordinary abilities. How different was the case of the late Earl of Chatham, as strikingly evinced in the unfortunate business at Walcheren. The former attained eminent distinction in defiance of every obstacle; the latter, though assisted as much as possible, gave to the world a miserable demonstration of his incapacity. Wolf was correctly placed; the Earl of Chatham might have shined perhaps in the pulpit, but was no way calculated for the battle field.

Hence it cannot be denied, that, by the aid of phrenology, mankind would be able to measure the quantity, and ascertain the predominant quality, of the intellectual faculties of youth, to direct their attention to the proper channels, and thus enable the individual to exercise that pursuit in which he was likely to become a proficient, deriving, in such case, the greatest possible advantage from the influence of education. Moreover, this divine science, while it would enable us to form a correct opinion of the intellectual capacity of Human Nature, is applicable also to every variety of the Brute Creation, and would become an infallible guide in the ascertainment of their feelings and dispositions, as well as of their *sagacity*—a term which cannot be offensive to those who are unwilling to acknowledge the mental capacity of the lower orders of animals as constituting *reason*.

It must, however, be admitted, that instances may be given of persons whose cerebral development, generally speaking, was remarkably prominent, and

who were therefore capable of acquiring excellence in various branches of the arts, sciences, and intellectual attainments. Of this Lord Bacon is perhaps the most exalted example which could be brought forward. At the same time it is worthy of observation, that where the cerebral development, indicative of a particular faculty, appears more than usually prominent, though the individual is calculated to excel in the ramification of art or science for which the faculty in question is strictly and directly appropriate, he will not attain eminence comprehensively, unless it is supported as it were by other organs; for instance, when a strong development of the organs of imitation is manifest, the individual will be likely to become a draughtsman or painter; but though he may delineate likenesses, he must possess a comprehensive mind in order to enable him to reach the pinnacle of his profession. Hence the reason that so few painters attain distinction: in general, they merely trace resemblances on the canvass; but it is only such persons as the late Sir Thomas Lawrence, Fuselli, Edwin Landseer, Wilkie, &c., &c., whose highly intellectual capacities enable them to breathe life and spirit into their compositions.

Let it be borne in mind, however, that a large forehead does not uniformly indicate superior power of mind, unless its structure be correct; a malformation of the frontal must be viewed, not as a sign of mental superiority, but the reverse, and is in many cases productive of, or accompanied by, idiocy.

THE MEDICAL PROFESSION.—Of all the occupations or pursuits to which the mind of man is directed,

none requires so much care in the selection of its intended practitioners as the medical profession, since the lives of their fellow-creatures are unhesitatingly placed in their hands; and although no doubt can be ascertained that serious mischief, and frequent deaths, result from the incapacity of unskilful and ignorant medical men, unlike all other cases of crime, no satisfactory redress is obtainable. If a clergyman be not very highly gifted, it amounts to little, that is, society is not likely to sustain much injury from his lack of scientific attainment; his duty lies openly spread before him, and he cannot err to any mischievous extent;—the case, however, is widely different where health, limb, and life, are intrusted to presumptuous ignorance, instead of sterling professional skill. When a youth is selected for the medical profession, the bent of his mind is seldom taken into the consideration; and in this manner it not unfrequently happens, that an individual who might have attained respectability, or even eminence, as a mechanic, an engineer, &c., is forced into an occupation in which it is impossible he can excel, or indeed acquire sufficient knowledge to avoid those deplorable consequences to which allusion has already been made. The medical profession is highly scientific; therefore, the youths intended to pursue it, should present a considerable development of the perceptive and reflective organs, plainly and unerringly indicated by phrenology, which, if judiciously employed as a guide in the placing out the rising generation for the means of future subsistence, or for occupations suited to their capacities, much mischief and much misery would be prevented.

HEREDITARY INSTINCT—SYMPATHY—FASCINATION,
WITH ILLUSTRATIVE ANECDOTES.

IN prefixing the term *Hereditary Instinct* to this article, I entertain no intention of hurling defiance in the face of the critic; but as it appeared to me to indicate the impression of my own mind upon the subject which I propose to investigate and discuss, in the simplest and most intelligible manner, I adopted it accordingly. Those who peruse the sequel will be enabled to judge of the correctness of its application, and I am most willing to abide by their decision.

If we look at animated nature, we shall find, that a feeling or notion of danger is implanted throughout creation at that early period of existence, when such an impression could not have originated from sight or experience, but must have been sympathetically communicated from the female to the growing fœtus in the womb. Or why does the fawn testify alarm, and fly from the tiger, the first time it beholds him, if it were not for a consciousness of danger imparted by sympathetic precept, as no opportunity of ocular instruction could have occurred? If the young animal just mentioned come in contact with the elephant, the ox, and the buffalo, its terrors are not excited; it testifies no alarm; it feels confident that no danger is to be apprehended from them; yet this correct knowledge or feeling of safety must have been imparted in the same manner as the impression of terror at the presence of the tiger had been conveyed.

Timid creatures, such as those of the antelope and deer tribes, for instance, are dreadfully excited by the presence of feline animals, from which, if possible, they fly in the utmost terror; and a similar observation may be applied to the hare, the rabbit, and the rat, the first time they become aware of the presence or proximity of the weasel. As far as relates to the rat, indeed, it may be said to see its mortal enemy but once; it endeavours to retreat or fly; the weasel instantly commences the pursuit, and as it is able to follow the rat into its subterranean retreat, the destruction of the latter becomes inevitable. It is interesting to witness the struggle between these two diminutive quadrupeds. I have been several times presented with an opportunity for this purpose. Some years ago, when riding from Gracedieu Park to Loughborough (Leicestershire), and very near to the former place, I heard the screaming of a rat, and instantly directing my attention to the quarter whence the noise seemed to proceed, I observed a very large rat pursued by a small weasel, and in a few seconds the inner angle of a high wall stopped the progress of the rat: he was thus confined in a corner, and instantly faced about to receive the attack in front, setting up his back and screaming loudly all the time. The battle seemed to be fiercely contested; it was for life on one side, and a supper on the other (evening was fast approaching). To those unacquainted with the nature of the animals (the tenacious gripe and invincible courage of the one, and the compulsory defence of the other), the advantage would have appeared in favour of the rat for the first few

seconds of the struggle: but the cries of the latter became weaker, as his strength decreased, till, with a feeble and convulsive lament, he rolled on his side; when it became perceptible that his sanguinary antagonist held him firmly by the side of the neck, whence he continued to drain the blood of his victim. I waited (in company with my friend, Mr. Thos. Walker, of Stanford Hills, near Loughborough) for a short space, during which the weasel kept his hold of the rat's neck (evidently sucking his blood), when I alighted, and proceeding towards the spot, the weasel suffered my near approach before it reluctantly quitted its prey; it paused at the distance of some twenty yards, and turned as if to ascertain whether I carried away its slaughtered prize. On examining the rat, I found that the weasel had seized it by the side of the neck, one of the fangs or canine teeth of the latter having apparently perforated the jugular vein, from which no doubt the fierce and sanguinary little quadruped was drawing the blood when I compelled it to retire. The rat had received no other wound. The weasel had evidently fastened on the rat by the side of the neck the very moment that the contact was sufficiently close for that purpose, and firmly kept its hold in defiance of all the rat's efforts to disengage it. Whether the weasel had received any hurt, whether the rat, by his long, thin, curved teeth, had been able to inflict any wound upon its invincible assailant, I am not able to determine, but in its retreat no symptom of injury became manifest. I am of opinion, that the moment the weasel made good his hold, the rat

was rendered incapable of biting; and therefore, if he were not lucky enough to wound his enemy at the very onset, he was incapable of effecting it afterwards.

It would evidently appear, that as the rat receives the knowledge of its natural and unrelenting enemy by that wonderful communication which I have called *hereditary instinct*, the *modus operandi* of which may be much more forcibly conceived than any form of words could image to the mind, so the weasel is taught, by a precisely similar process, the method of securing its prey with the least danger to itself. Nature has showed her kindness by arming it in a peculiar manner for the purpose. Any person who will take the trouble to examine the formation of the head, the jaws, and the teeth, of one of these animals, will easily perceive how admirably calculated they are for strength of gripe and persevering adhesion. The weasel uniformly seizes its prey in the manner already described. I have seen several hares and rabbits which have been killed by weasels; a wound in the side of the neck has been the only perceptible injury which they have received.

Fourteen years ago, as I was proceeding from the village of Newsham (Yorkshire) up to the moors in its immediate vicinity, in company with Mr. Swaby of that place, we observed a well-grown leveret bounce into the lane in very great alarm; it paused, listened, moved towards us in an unusual manner, quitted the lane, and re-entered the fields. There was something in its movements and appearance calculated to excite attention. Had the leveret been pursued by a dog, its motions would

have been less capricious ; it manifested that kind and degree of terror which left little doubt on my mind as to the cause from which it arose. It became evident after the lapse of a very short space. A weasel appeared upon its track : hot in the pursuit, it came boldly into the lane, flung for the scent like a hound, and entered the enclosure at the same place through which the leveret had made its way. Having witnessed something of the kind several times previously, I was prepared for the sequel. Instead of continuing its course, the ill-fated leveret had stopped at the distance perhaps of one hundred and fifty yards from the hedge ; and, rendered helpless by terror, thus allowed its fierce pursuer to overtake and seize it. As the speed of the hare is so much superior to that of the weasel, had the leveret continued its progress, leisurely, as I may say, it would have left its enemy at an immeasurable distance ; but, instead of adopting, or rather of pursuing, the only mode which could ensure its safety, it sits down, suffers the approach of its destroyer, and receives its death uttering the most plaintive cries !

The rat possesses the will and the resolution to get away from the weasel if possible ; and when he cannot effect his purpose (and it rarely happens that he can accomplish it), he turns and offers resistance : the hare, on the contrary, though perfectly capable, by her extraordinary speed, to distance the weasel, loses all confidence, and after a short run she is terror-stricken ; her powers of exertion seem to become paralyzed ; she sits down, and in horror submits to her fate.

There appears something strange in the conduct

of the "poor timid hare," it is the very reverse of that pursued by the rat; but, in both cases, we may clearly perceive incontrovertible proofs of hereditary instinct, as well as of the wise and conservative order of Nature.

The vixen fox generally brings forth her young at some distance from the main earths, in an old dry sough, or some such place, which will generally be found to run a considerable distance underground. In the course of a short time, when the cubs have gained sufficient strength, they come to the mouth of their subterranean retreat, on the approach of evening, where, being very playful, they perform a variety of gambols; but instantly disappear on the sight of a human being, though the approach of a horse or a cow gives them no uneasiness or alarm. What then can have communicated such information to the young animals?—information which enables them to recognise their enemy the first time they behold him! It must have been conveyed by that mysterious process, which however inscrutable to us, however it may defy the most ingenious efforts of human investigation, is in perfect accordance with the regulation of unerring nature, evidently rendered indispensable for the preservation of the species.

On the 30th of January, 1835, in passing along Holborn, I observed, near the top of that street, at the entrance to an exhibition, written in conspicuous characters—"A *Serpent will be fed in ten minutes.*" I immediately resolved to witness the process. Instead of ten minutes, half an hour elapsed before the business commenced; in the

mean time, I, and about twelve or fourteen other persons, who were desirous, like myself, of gratifying a very reasonable curiosity, were ushered into an apartment destined to be the scene of operation. In this apartment I perceived a full-grown rabbit, which, having been bred and reared in a domestic manner, was remarkably tame, and, by its contented and tranquil aspect, was evidently unconscious of the fate which awaited it. The serpent was at length brought in, and the moment it fixed its eyes on the rabbit, the latter uttered the most plaintive, the most pitiable cries, perfectly aware of the dangerous presence of its deadly enemy, though this was the first time it had ever beheld anything of the kind. Now, by what mode could such accurate intelligence be conveyed to the rabbit, unless through the mysterious, the wonderful, the impressive process, to which I have already several times alluded? I will relate the sequel, though by no means indispensable to the elucidation of the present subject; but inasmuch as it will serve to relieve or give variety to that which might otherwise appear monotonous, it may not be unacceptable to the reader.—A minute or two elapsed ere the serpent struck, when seizing the rabbit by one of its fore legs, it instantly enveloped the head of the latter in the constrictive folds of its body. The rabbit was prevented from breathing; it struggled for some seconds—perhaps for a minute or two, shot out its hind legs, and expired. The snake immoveably kept its hold for twelve minutes, when, with glaring eyes, it raised its head, and taking the nose of the rabbit into its jaws, it commenced

the extraordinary process of swallowing its prey. Its upper jaw became expanded in some degree, at the base of which there was a joint, or at least a cartilaginous expansion which presented the same appearance, as was evident from the motion of the part; the lower jaw, like the upper, expanded very triflingly; yet the progressive extension of the gullet offered a surprising subject for physiological contemplation. This extension was accomplished by the gradual separation of the roots of the jaws by the stretching of the lateral ligaments, till the head of the rabbit disappeared. The body slowly followed, the serpent all the time working the muscles of his body in a constrictive form, so that much of the reptile's length became diminished in order to increase the thickness of its anterior; and thus the neck, which at first was not thicker than the wrist of a child three years of age, if so thick, became prodigiously swelled out or distended. On close inspection, the saliva of the snake might be observed to ooze or exude from its lips, which of course rendered the passage of its prey more easy; but it did not, as some natural historians have erroneously stated (Buffon, among the rest) make use of its tongue for the purpose just mentioned; nor indeed is the needle-like forked tongue of a serpent calculated for the performance of such an operation. Moreover, the reptile made no attempt to break the bones of its victim, ignorantly stated to be the practice of the serpent tribe before they proceed to gorge their prey. However, the body of the ill-fated rabbit gradually disappeared; so that, in forty-three mi-

nutes from the time the snake seized it, not even the hind legs were to be seen. Yet, the circular constrictive or compressive operation of the serpent's muscles continued till its prey was forced completely below the neck, when that part consequently became thinner, exhibiting a portion of flaccid ligament or skin underneath.

Several months afterwards I visited the same place for the purpose of witnessing another and a larger serpent seize and swallow his prey: but although the snake was considerably larger, it was not so vivacious, and nearly double the time elapsed ere it completely gorged the rabbit. I was at a loss to conceive in what manner the serpent could breathe while swallowing its prey, its gullet all the time being so full and so distended. However, on this occasion, when the serpent was rolled on its side by one of the attendants, there very distinctly appeared, fixed in the nether jaw, a pipe or tube, which, in a valve-like manner, opened and shut, and by means of which inspiration and respiration seemed to be performed during the act of swallowing the rabbit.

Innumerable instances might be given of those nascent or inherent impressions of fear and incontestable evidences of discrimination similar to those already recited; but it would be a very unnecessary multiplication of facts, about which no person would think of offering the slightest dispute; however, it seems requisite to notice the modifications of which hereditary instinct is susceptible, and consequently the qualified appearances it assumes, according to the influence of circumstances. It

may be therefore justly observed, that, in all wild creatures, and such as derive a precarious or mischievous existence, the impressions of the intuitive knowledge under consideration are more forcibly imparted, and its manifestations much stronger, than in animals which have been reduced to subjection by man, and have become domesticated.

Hereditary instinct is the result of sympathy; and if, for the purpose of showing the various forms in which sympathetic affections present themselves to our observation, we look at human nature, we shall be equally surprised, and equally lost in the contemplation of them. Father Malbranche states, that a woman of Paris, the wife of a tradesman, went to see a criminal broken alive upon the wheel. She was at that time two months advanced in her pregnancy, and no way subject to any disorder to affect the child in the womb. She was, however, of a tender habit of body; and, though led by curiosity to this horrid spectacle, very easily moved to pity and compassion. She felt, therefore, all those strong emotions which so terrible a sight must naturally inspire; shuddered at every blow the criminal received, and almost fainted at his cries. Upon returning from this scene of blood, she continued for some days pensive, and her imagination still wrought upon by the spectacle she had lately seen. After some time, however, she seemed perfectly recovered from her fright, and had almost forgotten her former uneasiness. When the time of her delivery approached, she seemed no ways mindful of her former terrors, nor were her pains in labour more than usual in such circum-

stances. But, what was the amazement of her friends and assistants when the child came into the world! It was found that every limb in its body was broken, like those of the malefactor, and just in the same place. This poor infant, that had just suffered the pains of life, even before its coming into the world, did not die, but lived in an hospital in Paris for twenty years after.

Darwin has brought forward many surprising facts, in order to prove the impressive influence of the mind of the parents on the embryo; but, without quoting that celebrated writer's observations, if we look round, we may perceive innumerable instances of this extraordinary sympathetic communication in the most indubitable, as well as in the most fantastic and most capricious, forms.

If we look at the brute creation, we may easily perceive the preponderating influence of that feeling or sensation of which I have been speaking; and, if we turn our attention to the feathered tribes, and duly consider the matter, we shall be lost in astonishment at the manner in which nature adapts herself to circumstances, or acts in compliance with the will of the creature. Thus, the thrush, which forms its nest early in the spring, if disturbed by the destruction of its nestling edifice, a few days (or perhaps twenty-four hours only) before the time when she would deposit her eggs, can so far restrain or suspend the customary operations of nature, as to procrastinate the period of laying till her curious receptacle has been restored.

The magpie deposits from five to seven or eight eggs in its nest. At the village of Belton, in Lei-

cestershire, one of these birds formed its temporary habitation in a lofty ash-tree; it was in my school days: I ascended the tree, and finding four eggs in the nest, I took out three, leaving one for what is called a nest-egg. Every second or third day I climbed to the nest, and continued to take eggs from it till the number amounted to twenty-one, when the bird ceased to lay—furnishing, however, a striking proof of the influence of the will over the animal functions, or what may be very correctly denominated the power of *sympathy*.

Further, if the thrush, the blackbird, and most, if not all, other birds, have their eggs destroyed, or their young taken, they very soon re-commence the important business of propagation, and, if again disturbed, in like manner will reiterate the experiment, if the summer be not too far advanced. Yet, if, in the first instance, no interruption had occurred to the progress of incubation, nestling, &c., but that the young had flown, the breeding impulse of the parent birds would have remained inactive till the following spring.

When a schoolboy, I was in the habit of ranging the woodlands which fringe the townships of Belton, Worthington, Breedon, Tongue, and Diseworth; and, upon one occasion, I met with the nest of a wood-pigeon, containing two young birds. They were what might be termed early birds. I robbed the parents of their nascent treasure; and, happening to pass the place about a fortnight afterwards, was pleasingly surprised to find two eggs deposited—upon which, indeed, one of the old birds was sitting. In due time they were hatched, and I

robbed the nest again. Eggs were deposited, and young produced, for the third time. For the third time the parent birds were deprived of their offspring, when they abandoned the business of procreation, the season being far advanced. Hence may be clearly perceived what, to express myself philosophically, may be termed the preponderating influence of mind upon matter; the obedience of the animal functions to volitive power; or, in other words, the surprising operation of *sympathy*.

Illustrative observations, similar to the above, might be very much multiplied; and I will take leave to remark, that I am doubtful, if, in the description of the system of the universe, the word *sympathy* would not more correctly and more intelligibly express what is meant by the term *gravitation*.

It may be further remarked, that sympathy operates to a very great extent in a manner differing from that in which I have hitherto considered it; which, however, is equally interesting, but which has never yet received that attention which so important a subject would seem to demand. It admits of very satisfactory elucidation in a variety of forms, which may, perhaps, be not improperly denominated *responsive sympathy*.

Different opinions will be found among sportsmen as to the best mode of levelling the deadly tube, or taking aim: some approve of shutting one eye, and looking along the upper surface of the gun-barrel with the other; others prefer looking along the barrel with both eyes open; while others again

contend, that the best mode is to look directly at the object (partridge, grouse, or whatever it may be) without including the barrel of the gun. I have not the least doubt, that good marksmen are to be found amongst the three classes; indeed, I know it, as confirmations of what I assert have frequently fallen under my observation. I have heard the point frequently discussed after the sport of the day, in which, however, the main-spring, the very essence of the matter, was never thought of, and consequently not taken into consideration. Precision in shooting at game can only be obtained by the perfection of the responsive sympathy between the finger and the eye, and precisely in the degree in which this is possessed by the shooter, will be the result of his performance; therefore, in whatever form the aim may be taken, if the sympathy between sight and touch be not in unison, the object in view will not be accomplished.

This axiom is forcibly elucidated in one department of the operations of the angler—I allude to fly-fishing. An expert fly-fisher will throw his flies with uncommon precision, though he looks neither at his rod nor line, but keeps his eye steadily fixed upon the spot where he wishes his fly to fall:

“ Lightly on the dimpling eddy fling
The hypocritic fly’s unruffled wing.”

An admirable illustration is given of this subject in ‘*Vaillant’s Travels in Southern Africa.*’ “Among the diversions (says he) in which we were accustomed to engage together, there was one that, at the time it was proposed, and even after I had

made the experiment, singularly astonished me. Whenever a novelty of this kind was the question, I was always prepared the instant it was started. Accordingly, I took up my fowling-piece, and was ready to be gone. ‘Stop’ (said they), leave, if you please, your fire-arms, which will only incommode us. The chase to which we invite you is of a new kind; having never seen it, you will make but a sorry figure. Follow us, then, and be satisfied for once with being an humble spectator.’

“My guide yoked his oxen, and we set off, he with a long and enormous whip, such as the planters make use of, I with nothing but a stick, which served me as a cane. Arrived at the scene of action, he took his plough and began to trace a furrow. The new earth no sooner appeared, than I saw a vast quantity of very small birds flock together from every side, and almost alight upon the ploughshare, which they eagerly followed. Of what could these birds be in pursuit, that neither the instrument that was in motion, nor the man who directed it, could terrify them? Alas! they darted to the ground to devour creatures animated like themselves, the maggots, worms, and insects, which the plough exposed to their view. So unexpected a sight was almost perfect ecstasy! It had one alloy however. Empty handed and without weapons, I was obliged passively to contemplate these devourers of insects, without being able to secure one of them. These birds were killing animals weaker than themselves; I was desirous of killing the birds; while perhaps behind me was some more ferocious beast longing to treat me with the same kindness. Without the

slightest preamble, Haber coolly asked me which of the birds I should like to have? I ventured to point out one, though I had no doubt he was laughing at me. Immediately flourishing his enormous whip, he brought to the ground the very same bird. In twenty instances that I put his skill to the proof, he never once missed his aim. This dexterity of the whip indeed is an acquirement general among the planters; but Haber was an adept in the exercise whom I never saw surpassed."

The influence of responsive sympathy, or the susceptibility of corresponding impression, becomes manifest in the operations of the artist, as well as in the exertions of the stage-player; and when we consider or reflect upon the ability of the one or the other, we shall find the manifestation of it to be precisely in proportion to the development of the faculty above mentioned; or, in other words, he who possesses the greatest share of responsive sympathy, will excel his competitors. In this case, it shows the extraordinary influence of mind upon matter; and although the precise operation is beyond the reach of human comprehension, the cause and effect are sufficiently perceptible.

If we turn our attention to military operations, as far at least as the musket is concerned, I am of opinion, we may trace the cause of the little effect of infantry firing to the absence of responsive sympathy. When the field of battle is enveloped in smoke, the aim cannot of course be taken; but, even at the commencement of an engagement, sufficient attention is not paid to responsive sympathy, and in consequence by far the greater number of

balls are uselessly spent. Hence may be perceived the reason of the superior effect of archery, or of the greater number thus slain in former times, though the power of the bow, compared to that of the musket, sinks into almost nothingness.

The manner in which savages use the bow shows the influence of responsive sympathy. They fix their eye steadily on the object, and (without regarding the arrow, at least as far as aim is concerned) so obedient has practice rendered their fingers, that the arrow is let go with such certainty, we are told, as to bring down a bird on the wing. Hence it may be very forcibly perceived that the correct propulsion of projectiles, missiles, &c., depends upon the responsive sympathy, or delicate union, of sight and touch.

Fascination, in the way in which I am about to speak of it, may be regarded as the opposite of sympathy. In the general acceptation of the term, by *fascination* is understood a sort of charm, in which the feelings are more than ordinarily interested; the term may be incorrectly applied perhaps on the present occasion, yet I am acquainted with no other that will be better understood. If in one case it serves to express a pleasing excitement of the feelings, in the other it is used to denote the prostration of the faculties; in the latter sense I intend to employ it. Much has been reported on this subject, which will not endure the test of investigation; while nothing is more easy than to assume an air of wisdom by affecting to be incredulous; but, when the evidence of facts is produced, it were folly to withhold admission.

Many stories are recorded of the natives of the East Indies charming serpents, which appear to exceed the bounds of credulity, and therefore I reject them ; nor indeed does the kind of fascination attributed to them come within the intention of the present disquisition, which is meant to apply only to that sort of fascination which is produced by the organs of vision, not to the effect of music or sound on the auditory canal. Bruce was satirized, and indeed very ill used, because he related the strange doings of Abyssinia ; but they were not the less true on that account, as posterior writers have confirmed whatever he stated which appeared to border on the extravagant. The power of the snake to fascinate its prey was scarcely credited by me, till I witnessed very strong collateral confirmation of it.

We are told by naturalists (by Buffon, for instance) that the rattlesnake conceals itself beneath some tree, and a squirrel or small bird no sooner appears amongst its branches, than protruding its head, with jaws extended, it directs its deadly glare to the object above ; on which the squirrel or bird becomes alarmed, manifests every symptom of agitation, and, after some little fluttering and other impotent efforts to escape, ultimately precipitates itself into the gaping jaws of its glaring and terrible enemy. This description at first view may appear to border on the romantic ; but, while I admit its high colouring, I am by no means prepared to deny altogether the power which is thus attributed to the reptile in question. Some time since a vessel arrived at Liverpool from America, bringing, along with other natural curiosities, a very vivacious rattlesnake, about four

feet and a half long. This reptile was purchased by a dealer in birds, beasts, &c., in whose possession I saw it. The snake was confined in a cage two yards in length, which was placed in a warm room. I observed the reptile lying in a serpentine form. The owner of it shook a small stick at one end of the cage to excite its attention, while he slipped in a linnet at the other. The snake no sooner observed the unfortunate feathered captive, than it rattled, coiled itself up, and, with its head and neck protruded about four inches from the centre of the coil, it fixed its terrific and deadly glare on the bird, extending its jaws at the same time, and darting out its forked tongue, which it moved backward and forward repeatedly. The snake continued in this position for the space of a minute or longer, and then darted upon the linnet. It bit the bird, but made no attempt to devour it: the poor feathered martyr died almost immediately. The linnet, on being put into the cage, manifested no extraordinary agitation; which, however, amounts to nothing, as the bird had been reared and kept in a state of captivity, and had consequently lost that hereditary instinct which is uniformly found in wild animals, and those which exist in a state of unlimited freedom. There was something in the widely-extended jaws, the terrific glare, as well as the manner altogether, of the serpent, which left an impression on my mind, that the rattlesnake possesses in some degree the power of fascination, though perhaps not to the extent which some writers have described.

A mouse was afterwards introduced, to which the snake paid not the least attention; and, after a few

minutes, the little animal made its escape through the wires of the cage. On a young alligator (which the dealer had in his possession) being introduced, the serpent sounded his rattle, but appeared to manifest symptoms of alarm rather than any disposition for attack. I never saw a rattlesnake which appeared so alert and vivacious as the one of which I am speaking, though I have seen at least a dozen which have been exhibited in this country. Shortly after it had killed the linnet, an elderly gentleman entered the room, and approached close to the cage, when with extended jaws it fixed its deadly glaring eyes in a most peculiar manner upon him : there was something indescribably disgusting, malignant, and even appalling, in its aspect on this occasion ; so much so, indeed, that the gentleman upon whom the monster had thus fixed its revolting gaze, immediately retired with feelings of horror.

Lieutenant Sykes (a Yorkshire gentleman) informed me, that on his return from India, two large boa constrictors were taken on board the vessel, which was under the command of Sir Murray Maxwell. One of the snakes contrived to make his way out of the cage a few days after the vessel sailed ; and, after compelling the sailors to ascend the shrouds for safety, made his way into the sea and was seen no more. It had been ascertained that these creatures would feed once a month, and therefore a supply of goats was provided for the purpose. The snake gave indications of approaching hunger by uncoiling itself from its lethargic position, and moving about, when a goat was in-

troduced into its cage. The latter would testify every symptom of uneasiness, and even terror, before the snake prepared to destroy it: after a lapse of some minutes, the latter opened its jaws to a hideous extent, and fixed its glare upon the unfortunate goat, which appeared panic struck; the snake, in the course of a short period, darted at it, and seizing it by or near the head, completely enveloped it in its monstrous folds with the quickness of lightning. In this horrid embrace, the snake contrived to break the goat's bones, which might be plainly heard to crack; when, uncoiling itself, it commenced the operation of swallowing (in the manner described p. 185). This occupied some time: the snake first sucked in the head of the goat, and continued to draw in the carcass by suction till the whole disappeared; during which the reptile's eyes were so strained as to appear as if starting from their sockets. At length, when it had passed the whole into the stomach, it became sluggish, and continued inactive till again excited by the calls of hunger. The passage of the goat down the throat of the serpent was slow, and its approach to the stomach might be distinctly observed: when there, it formed a large protuberance, the decrease of which was very slow and very regular. In the process of digestion, the horns of the goat, as well as its bones, became decomposed, and were wasted away. The fœces resembled dry crumbled mortar, but lighter, and were voided in small quantities, to a trifling extent.

Daniel Johnson, in his 'Field Sports of India,' thus expresses himself upon the fascination of ser-

pents:—"It is not fabulous, but true, that they sometimes take their prey by fascination. I once witnessed it in company with Captain French, of the Bengal Native Infantry. Sitting on a terrace near a house, we observed a small bird on a tree at a little distance, shaking its wings and trembling; we could not imagine the reason of it. In a few minutes, we observed it fall from the tree, and ran to pick it up; to our great surprise, we observed a large snake making off with it in his mouth. He got into his hole before we could procure anything with which to destroy him."

The mode adopted by the hunting tiger of India to catch deer comes under the description of the fascination of which I am speaking. This animal (called the Cheetah) has been domesticated by the Indians, as far at least as its nature and disposition are susceptible of that degree of familiar obedience which amounts to domestication, before it is taken out for hunting. They are led into the fields, or carried in carts, hoodwinked; and when deer or antelopes are seen on the plain, should one be separated from the rest, the cheetah's head is placed directly opposite to it, and the bandage is taken from its eyes. The deer, which in the interim had been looking at the preparations for its capture with a sort of idle curiosity, no sooner perceives the countenance of the cheetah, than it seems to be fixed to the spot, and deprived of the power of moving away. The cheetah, on perceiving the deer, crouches, and its eyes assume that ferocious aspect so peculiar to the feline tribe: it creeps towards its object, glaring on the timid animal until its near ap-

proach enables it, by an enormous spring, to seize the victim, which has, during all the time, remained stationary, terror having subdued its powers of escape or resistance. If the herd of deer continue together, they will not suffer the approach of their crouching enemy; their union evidently imparts courage or confidence; they bound away, and are soon beyond the reach of danger.

The cheetah or hunting-tiger is an animal of the cat kind; and, in its mode of catching the deer, may be recognised the movements of the domestic cat. All animals of the cat kind, as their form and disposition are precisely similar, obtain their prey in the same manner. Unlike the dog, the jackal, &c., animals of the cat kind are not calculated for the lengthened pursuit, or to follow their game from information obtained by the olfactory organs; on the contrary, their capacity for the enormous bound, by being enabled to double themselves together (owing to the great flexibility of the back bone) and to bring their hind legs completely under them, forms a strong, if not an incontestable, proof that they were intended to capture their prey by ambuscade, surprise, and *fascination*. As far as relates to the latter, the most casual observer can scarcely have failed to notice the peculiar expression of the eye in feline animals when excited by anger; it is completely exemplified in the domestic cat: there is something indescribably terrific in its glare at that moment; and to this gaze, or look of furor, I attribute that paralysation of the animal powers so strikingly exhibited in the cheetah and the deer, which may be denominated fascination. If that peculiar expression

of the organs of vision in animals of the cat kind, which I have attempted to describe, be the cause of fascination (and I have not the least doubt but such is the case), similar observations will apply to the eyes of serpents: the expression of them is very different from that of the eyes of the lion or the tiger, but it is equally indescribable, equally terrific, and produces the same effect.

How far predaceous birds may possess the power of fascination, I cannot pretend to determine; but, from the very slow flight of the eagle, I am convinced it could never overtake a moorcock on the wing, and that grouse (in the Highlands of Scotland, where eagles are by no means scarce) constitute the greater part of their food I have not the least doubt. They must, therefore, seize moorgame on the ground; they must dart upon it from above; and, if they did not possess the power of fascination, or some singular faculty, the victim would not allow the approach of its merciless destroyer. This idea derives collateral confirmation from the manner in which the eagle prowls: it describes a circle in its flight on these occasions, sailing slowly round above the tops of the mountains, eyeing the surface below with its piercing gaze, till at length, perceiving its object, it drops upon and secures it. I have watched these birds many times for hours together; their flight resembles, as nearly as possible, that of the wood-buzzard, so frequently seen in Leicestershire, and the midland counties of England. Eagles frequently soar to a very great height, on which occasions they are evidently not in search of prey; when the latter is their object, they descend much lower, and,

to borrow the expression of the sportsman, *beat their ground* in the manner already described.

The greater part of the hawk tribe, it is very well known, are able to overtake the birds which constitute their food; but I have repeatedly seen a lark in the air await the approach of the hawk, and suffer itself to be taken.

These creatures, to which I have attributed, in a greater or a lesser degree, the power of fascination, accord in several characteristics; their voices are extremely discordant, although very much varied in sound. Nothing can be more terrific than the roaring of the lion or the tiger—nothing can impress more unpleasant sensations than the hissing of the serpent; while the harsh scream of the eagle, and the fierce piercing voice of the hawk, are calculated to produce feelings—not exactly of disgust, but yet the very reverse of pleasing. The expression of their eyes, though differing as widely as possible, is calculated to produce much the same effect. Moreover, these creatures are equally solitary; and, with the aid of a trifling stretch of imagination, may be supposed to know or acknowledge nothing beyond their own atmosphere; or, in other words, they are not gregarious, like the deer, the elephant, the buffalo, and many other quadrupeds—the rook, the pigeon, the starling, &c.—but pass their life in gloomy solitude, except when the genial desire prompts the sexes to approximate each other.

THE END.



